KOHERelec
ELECTRONIC COMPONENTS

COMPONENTS
FOR AUTOMOTIVE
PRODUCT CATALOG
2024-2025 VERSION

科 技 世 界 “ 感 ” 知 未 来　TECHNOLOGY WORLD "FEEL" THE FUTURE

KOHERelec

2024-2025 Version

OUR SERVICES
我们的服务

Delivery Services

Advanced Supply System
Automotive Grade: 6-8 weeks
Industrial Grade: 4-6 weeks
Consumer Grade: 2-4 weeks

Industry Services

Professional Industry Technology
Upgraded Solutions

Value-Added Services

Technical Support
Application Guidance Products
Full Lifecycle Services

Quality Services

Certified with ISO 9001,
ISO 14001, and
IATF 16949

Product Services

General Power Inductors
Magnetic Glue Inductors,
Integrated Inductors
Alloy Inductors, Coupled Inductors
EMC Devices, etc.

Custom Services

Various Application Scenarios
Customized Services

CONTENTS

Applications Guide
Products Line Up

连 接 数 字 世 界 与 现 实 世 界

Connecting digital world and reality

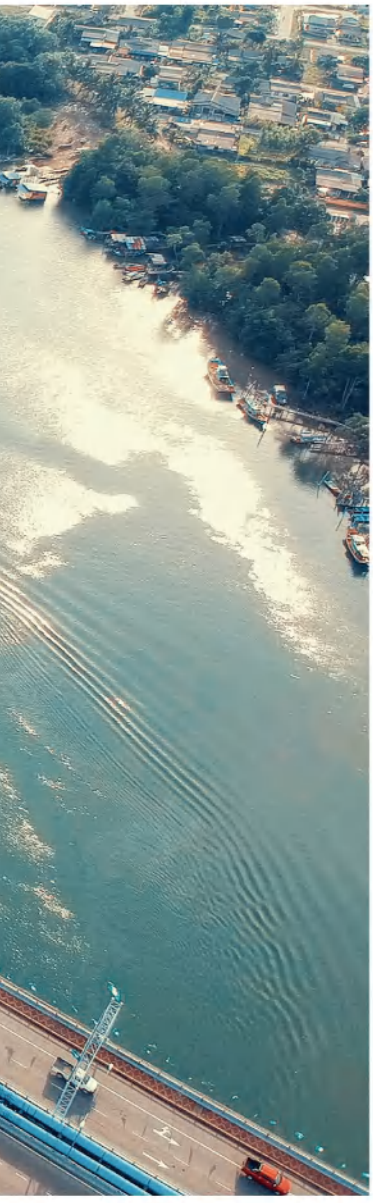
TECHNOLOGY WORLD "FEEL" THE FUTURE

科 技 世 界 “ 感 ” 知 未 来

TECHNOLOGY WORLD "FEEL" THE FUTURE

科或基于2030年“碳达峰”与2060年“碳中和”目标，积极采取各种对应措施，实现以可持续发展社会为目标的绿色经营理念。提倡全员环保、时刻节能。科技守护绿色未来，致力于污染防治和环境改善。助力碳中和，节能减排。追求永续发展，执行资源有效回收与再利用。

科或一直以来都十分重视环保主题，与市场趋势接轨、满足客户的需求，致力于环境保护，生产符合环保的产品。科或遵循欧盟所倡议的物质限用指令(Directive for Restriction of Hazardous Substances in Electrical and Electronic Equipment, RoHS)，生产符合RoHS规范的产品。



COMPANY PROFILE
公司简介

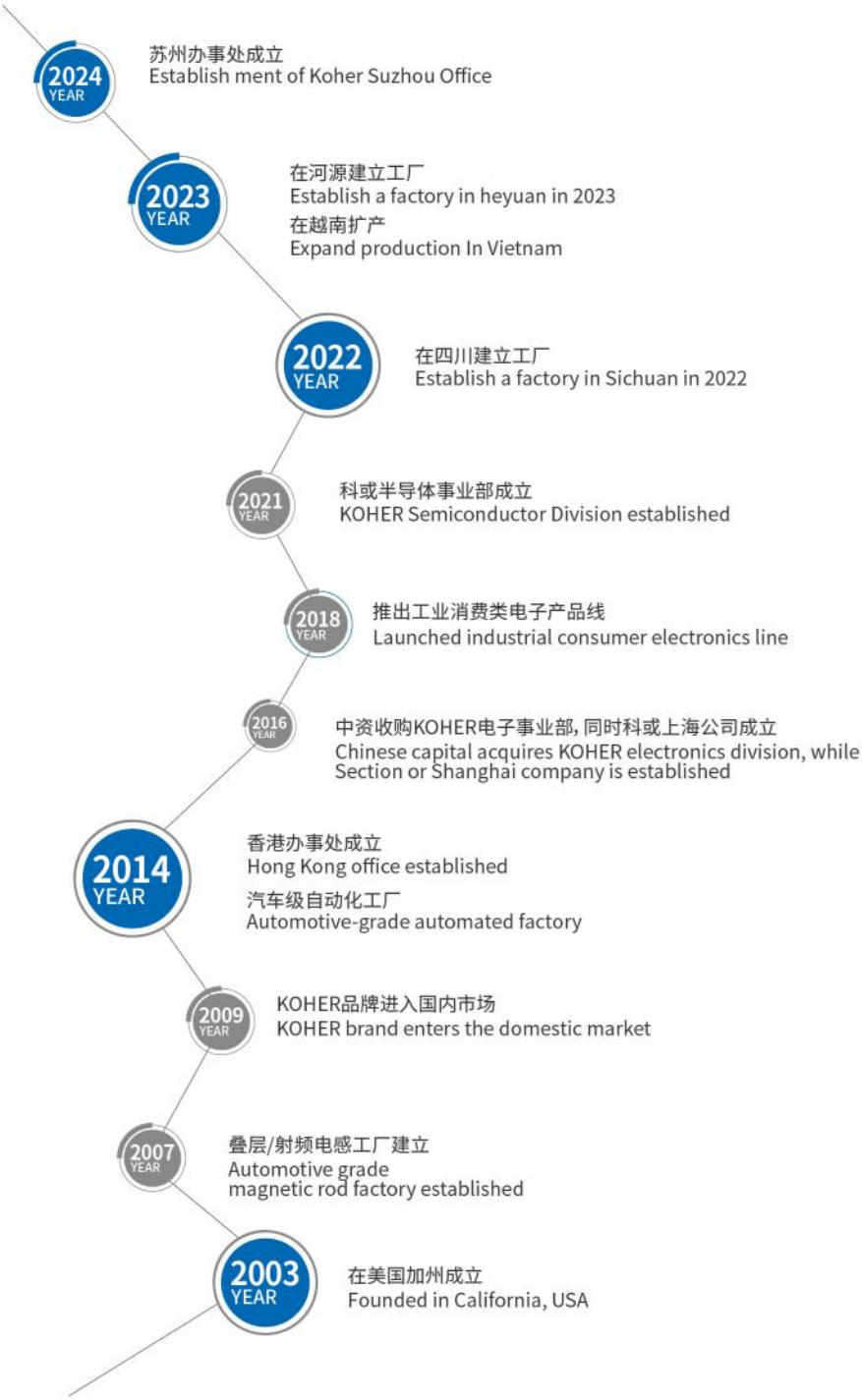
科或(上海)电子有限公司是一家专注于EMC电子元器件的开发、设计、生产和销售的国际化企业。自公司成立以来，一直致力于成为全球领先的磁性元件供应商，除了大量的标准组件外，KOHERelec还设计和生产定制磁性元器件，以满足客户精准的产品需求。公司主要产品有：一体成型电感、共模电感、叠层电感、功率电感、磁珠等；产品广泛应用于汽车电子、医疗电子、电力、工业自动化、电源系统、新能源、智能家居等多个领域。

KOHERelec is an international enterprise focusing on the development, design, production and sales of EMC electronic components. Since its establishment, KOHERelec has been committed to becoming the world's leading supplier of magnetic components. In addition to a large number of standard components, Koherelec also designs and produces custom magnetic components to meet customers' precise needs of products.The main products of the company are: integrated forming inductors, common mode inductors, laminated inductors, power inductors, magnetic beads and other products; Products are widely used in automotive electronics, electric power, medical electronics, industrial automation, power system, new energy, smart household supplies and other fields.

IATF16949

AEC-Q200 Qualified

COMPANY HISTORY
发展历程



BUSINESS DISTRIBUTION
业务分布

科或电子网络遍布国内外，以上海总部为中心，辐射江苏、四川、广东、台湾、香港、越南、美国等国家和地区，并拥有多条自动化产线。

我们信念如一，持之以恒，愿为数字世界与现实世界的链接提供科技支持，共生、共创、共享、共赢。

KOHERelec' s business is all over the country and abroad with Shanghai headquarters as the center, it radiates Jiangsu, Sichuan, Guangdong, Taiwan, Hong Kong, Vietnam, the United States and other countries and regions.And also we have a number of automated production lines.

We believe in the same belief and perseverance, and are willing to provide scientific and technological support for the link between the digital world and the real world, symbiosis, co-creation, sharing and win-win.

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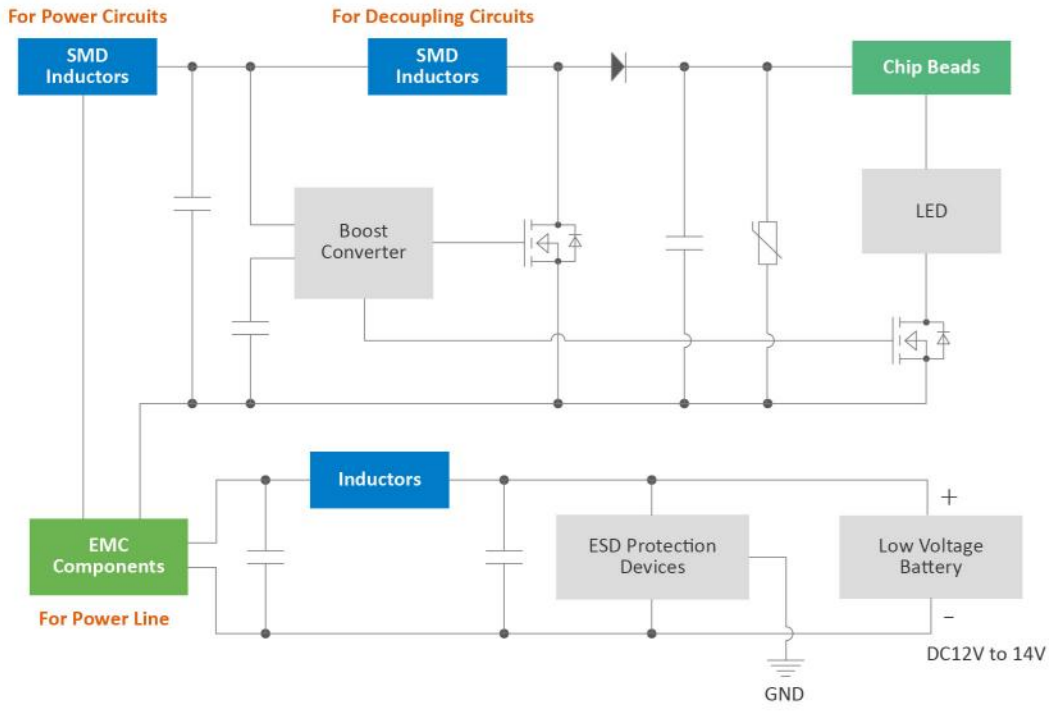
LED Lamp Module
车灯照明

Automotive exterior lamps are increasingly adopting LEDs to meet the growing needs for low power consumption and longer life. KOHER offers a broad lineup of Inductors designed to drive LEDs, and is actively involved in a number of activities to support the future of automotive lighting.

汽车外饰灯越来越多地采用LED技术以满足日益增长的低功耗和长寿命需求。KOHERelec提供用于驱动LED的电感器产品，并积极参与支持汽车照明未来的多项活动。



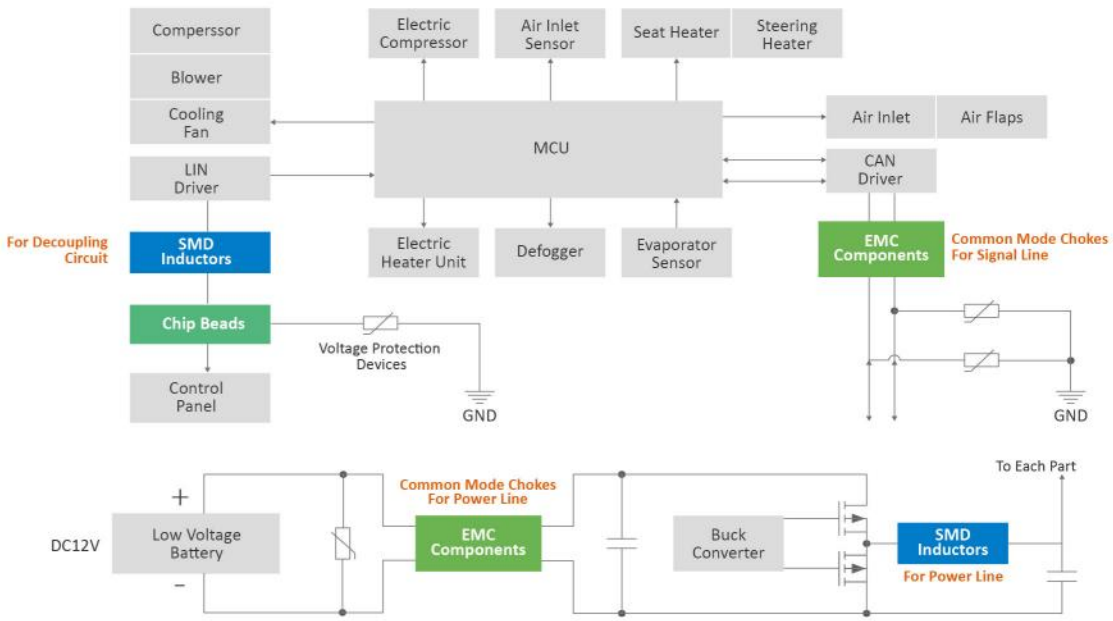
SMD Inductors	Power line 电源线	MDA Series	MDA HT Series
	Decoupling line 去耦电路	WIV Series	

EMC Components	Power line 电源线	BCMA7060	BCMA9070	FBHA S Series
	Signal line 信号线	ACMA Series		

HVAC Control Module
空调控制器模块

HVAC(Heating, Ventilation, and Air Conditioning) and car AC control modules perform system control of both cooling (via the refrigerant cycle) utilizing a compressor as well as heating by extracting exhaust heat from the engine using coolant water.HVAC systems typically include a manual mode enabling manual operation of the ratio between warm and cold air as well as fan speed, and an automatic mode that automatically adjusts the temperature and air flow based on a preset value.The following figure shows the block diagram of a typical HVAC system.

HVAC和汽车空调控制模块利用压缩机进行冷却（通过制冷剂循环）的系统控制，以及通过使用冷却水从发动机中提取废热来加热。HVAC系统通常包括手动模式，可以手动操作冷暖空气之间的比例和风扇速度，以及根据预设值自动调节温度和气流的自动模式。下图显示了典型HVAC系统的框图。



SMD Inductors			
	Power Line 电源线	MDA Series	MDA HT Series

EMC Components				
	Power Line 电源线	BCMA7060	BCMA9070	FBHA S Series
	Signal Line 信号线	FBA Series	ACMA Series	

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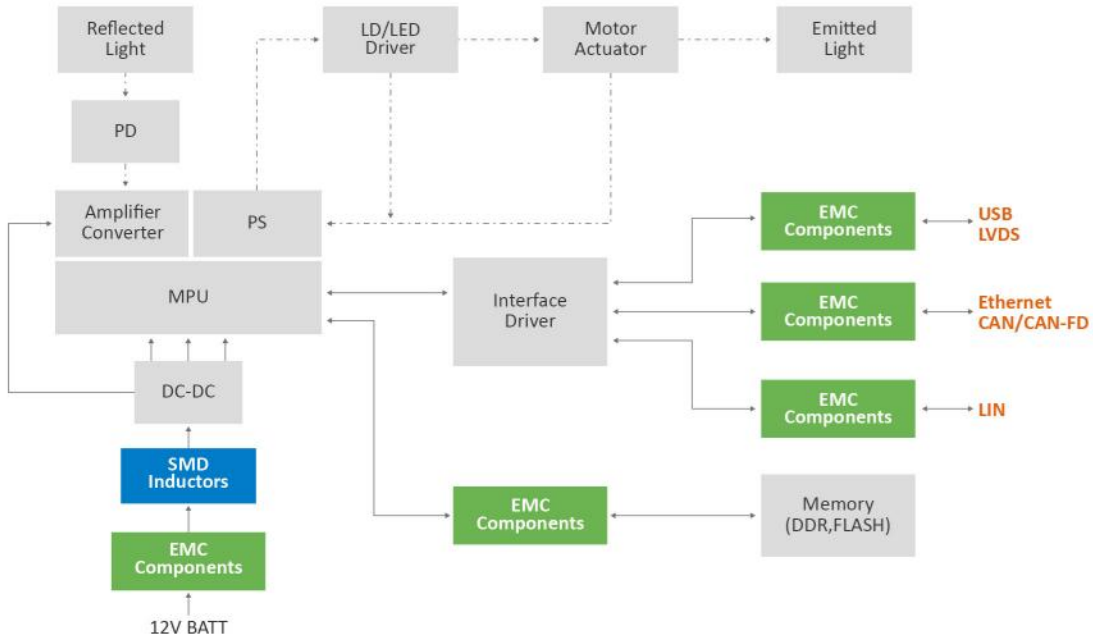
ADAS
Advanced Driver Assistance System
激光雷达

The advent of ADAS is accelerating the introduction of ADAS-equipped vehicles along with R&D. A variety of sensing devices required for system operation are used in different applications depending on features, and in recent years in addition to improving recognition and detection methods and reducing module size, the development of devices that take functional safety into account is increasingly demanded.KOHER offers a broad lineup of Inductors designed to the continuing evolution of ADAS/autonomous driving.

ADAS的出现正在加速配备ADAS车辆的引入以及研发。根据功能的不同，系统运行所需的各种传感设备被用于不同的应用中。近年来，除了改进识别和检测方法以及缩小模块尺寸外，对开发兼顾功能安全的设备的需求也越来越大。KOHERelec为ADAS的持续发展而设计,提供广泛的电感器产品。



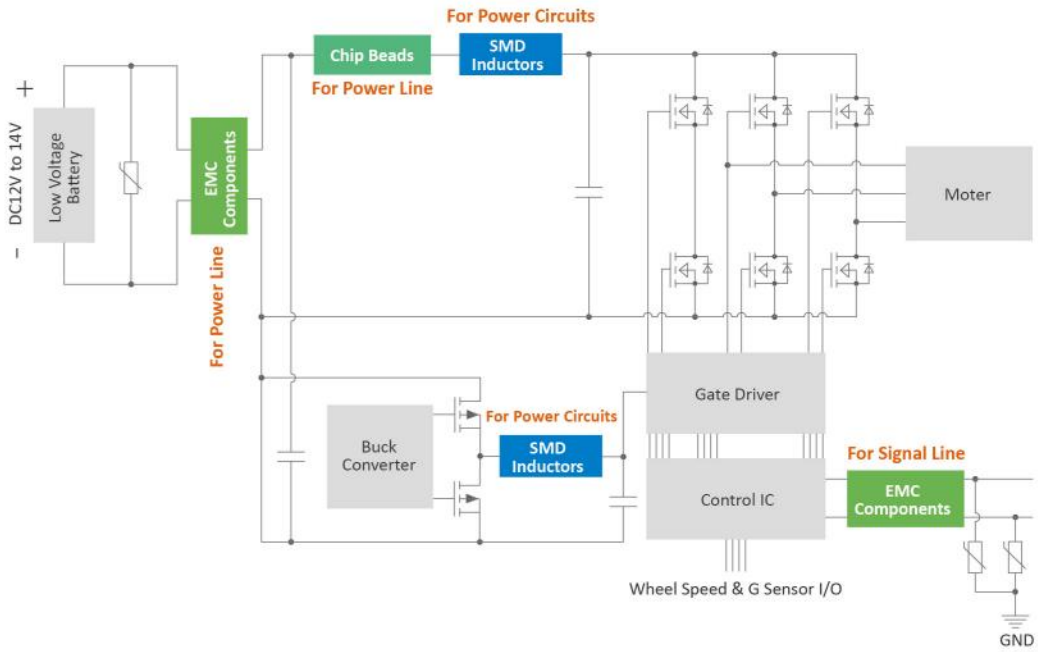
SMD Inductors					
	Power Line 电源线	MDA Series	MDA HT Series	MDTA Series	SPM Series

EMC Components					
	Power Line 电源线	BCMA7060	BCMA9070	FBHA S Series	FBHA Series
	Signal Line 信号线	BCMA2012	ACMA Series	ACMV Series	FBA Series

EPS
Electronic Power Steering
电子助力转向

Recent years have seen the increased adoption of electric power steering systems (EPS) in the latest vehicle models.In EPS systems the hydraulic pump is eliminated, reducing vehicle weight and improving fuel consumption by 3%.These systems are capable of adjusting the torque via software to achieve superior operability and driving performance.In addition, the steering torque is easier to adjust to the speed of the vehicle, and vehicle safety is improved by generating active torque based on the driving environment.Additional driver support features such as lane and parking assist are also possible by expanding the EPS functionality.The figure below shows a block diagram of EPS.

近年来，电动助力转向系统（EPS）在最新车型中的采用率越来越高。在EPS系统中，液压泵被淘汰，减轻了车辆重量，油耗降低了3%。这些系统能够通过软件调整扭矩，以实现卓越的操作性和驾驶性能。此外，转向扭矩更容易根据车速进行调整，并且根据行驶环境产生主动扭矩来提高车辆安全性。通过扩展EPS功能，还可以现额外的驾驶员支持功能，例如车道和停车辅助等。KOHERelec为ADAS的持续发展而设计，提供广泛的电感器产品。下图显示了EPS的框图。



SMD Inductors					
	Power Line 电源线	MDA Series	MDA HT Series	MDCA Series	SPM Series

EMC Components				
	Power Line 电源线	BCMA7060	BCMA9070	FBHA Series
	Signal Line 信号线	ACMA Series	ACMV Series	

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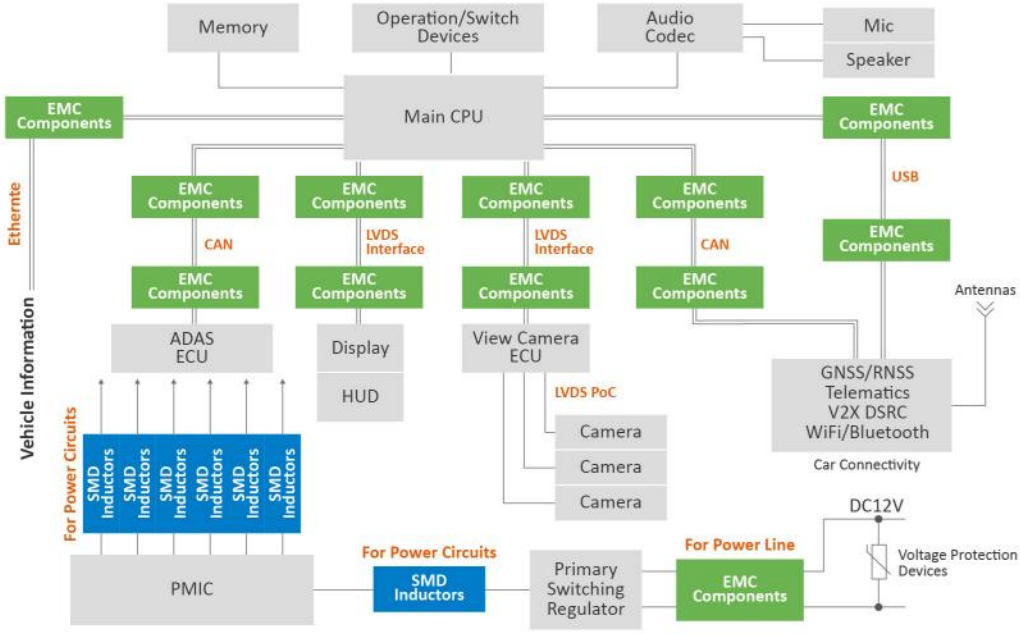
Smart Cockpit
智能座舱

The intelligent cockpit includes all modules that bring drivers and passengers a safer, more comfortable and intelligent driving experience: control system, entertainment system, air conditioning system, communication system, seat system, interaction system, perception system, etc.Control system includes: steering wheel;The entertainment system includes: center console screen, rear multimedia;Communication system includes: Bluetooth, WIFI, NFC, etc;The interactive system includes: central control screen, dashboard, HUD;Perception system includes: radar, cameras, driver health monitoring systems, air quality sensors, etc.

智能座舱包括带给驾驶员和乘客更加安全、舒适、智能的驾乘体验所有模块：操控系统、娱乐系统、空调系统、通信系统、座椅系统、交互系统、感知系统等。操控系统包括：方向盘；娱乐系统包括：中控台屏幕、后排多媒体；通信系统包括：蓝牙、WIFI、NFC等；交互系统包括：中控屏、仪表盘、HUD；感知系统包括：雷达、摄像头、驾驶员健康监控系统、空气质量传感器等。

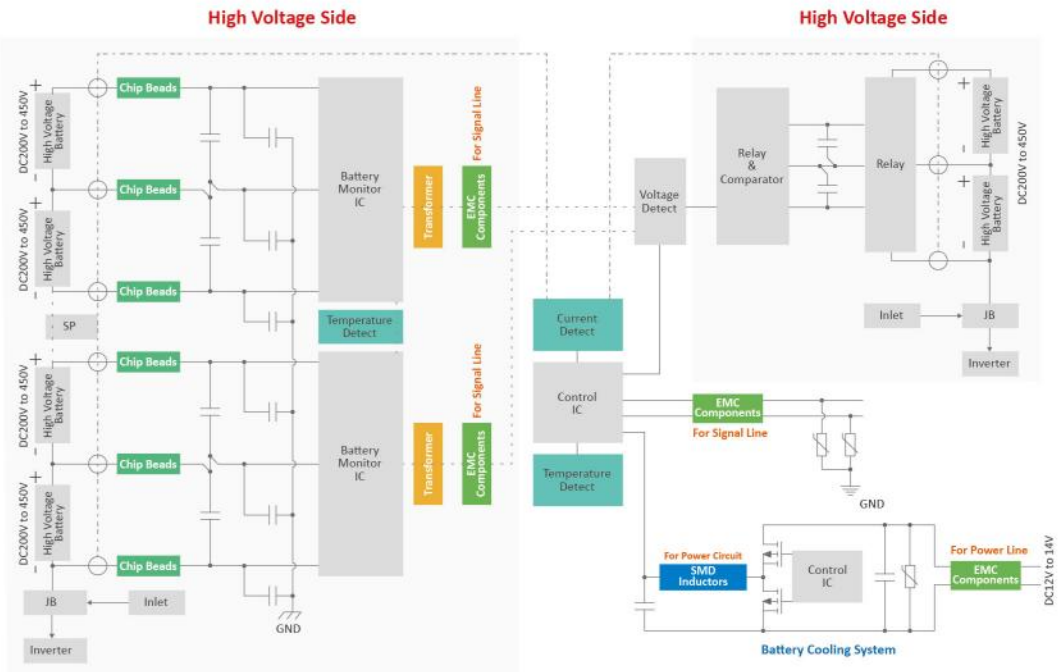


SMD Inductors	Power Line 电源线	MDA Series	MDA HT Series	MDTA Series	SPM Series
EMC Components	Power Line 电源线	BCMA7060	BCMA9070	FBHA S Series	FBHA Series
	Signal Line 信号线	BCMA2012	ACMA Series	ACMV Series	FBA Series

BMS(Battery Management System)
电池管理系统

Battery management system is any electronic system that manages a rechargeable battery (cell or battery pack), such as by protecting the battery from operating outside its safe operating area [clarification needed], monitoring its state, calculating secondary data, reporting that data, controlling its environment, authenticating it and / or balancing it.BMS are necessary for controlling the required power and maximizing the range of electric vehicles.KOHER offers a broad lineup of Inductors and Optimized solutions are offered for next-generation BMS that support multiple series connections.

BMS系统是管理可充电电池(或电池组)的电子系统。例如通过保护电池在其安全操作区域之外运行，监控其状态，计算辅助数据，报告该数据，控制其环境，保持内部环境的平衡。BMS对于控制所需的功率和最大化电动汽车的续航里程是必要的。KOHERelec提供广泛的电感器产品为支持多个串联的下一代BMS提供优化的解决方案。



SMD Inductors					
	Power Line 电源线	MDA Series	MDA HT Series	MDCA Series	SPM Series

EMC Components					
	Power Line 电源线	BCMA7060	BCMA9070	FBHA S Series	FBHA Series
	Signal Line 信号线	BCMA2012	ACMA Series	ACMV Series	FBA Series

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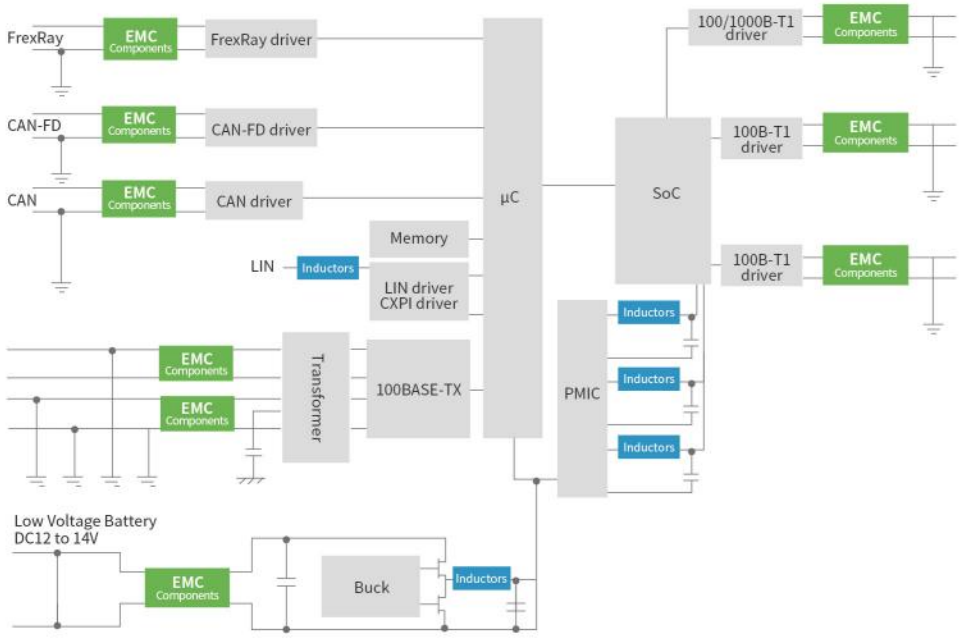
Gateway
网关

The Automotive Gateway, as the data exchange hub of the vehicle network, is the core component of the vehicle's electronic and electrical architecture, which can securely and reliably interconnect and transmit data across multiple different networks within the vehicle. It interacts information between shared data functional domains (powertrain, chassis and safety, body control, infotainment, remote information processing, ADAS) through physical isolation and protocol conversion. Vehicles are increasingly relying on electronic control units (ECUs) to enhance their driving experience. As a communication bridge between various ECU networks, the gateway controller achieves data exchange through external connections (including high and low speed CAN, LIN, ISO-9141, FlexRay, and Ethernet protocols), playing a fundamental role.

汽车网关作为车联网的数据交换枢纽，是车辆电子电气架构的核心组件，可以安全可靠地在车内多个不同网络之间互连和传输数据。它通过物理隔离和协议转换，在共享数据功能域（动力总成、底盘和安全、车身控制、信息娱乐、远程信息处理、ADAS）之间进行信息交互。车辆越来越依赖电子控制单元（ECU）来增强其驾驶体验。网关控制器作为各种ECU网络之间的通信桥梁，通过外部连接（包括高速和低速CAN、LIN、ISO-9141、FlexRay和以太网协议）实现数据交换，起着基础性的作用。



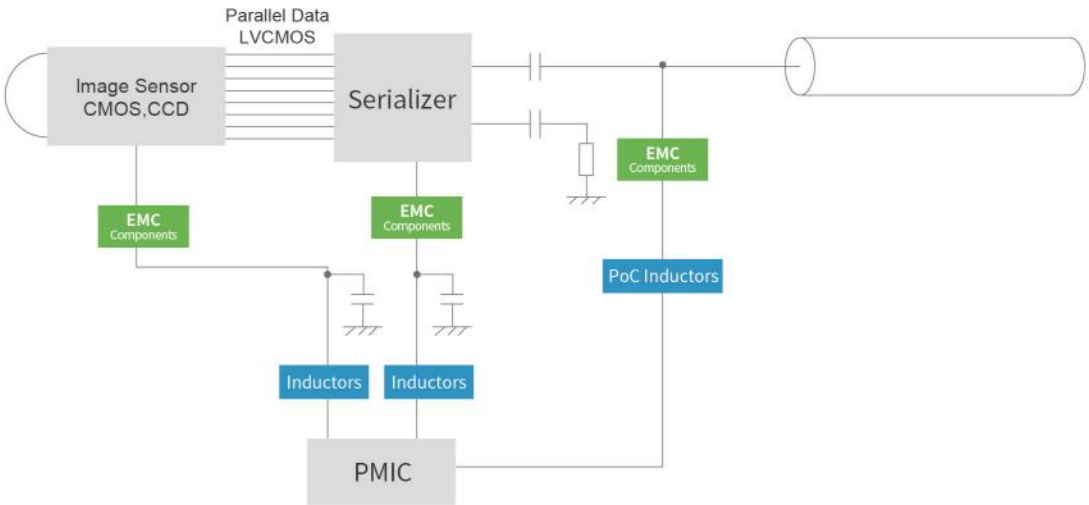
SMD Inductors	Power line 电源线	MDA Series	NRSA Series

EMC Components	Signal line 信号线	ACMA Series	ACMV Series	FBHA S Series	FBHA Series

PoC Camera
PoC摄像头

POC (Power Over Coaxial) is a technology based on coaxial cables for image transmission, coaxial control, and power superposition. In coaxial cables, high-definition video signals are transmitted while also transmitting power, that is, high-definition images and coaxial signals are combined with the power supply and transmitted on a coaxial line.

POC (Power Over Coaxial) 是一种基于同轴电缆的技术，用于图像传输、同轴控制和功率叠加。在同轴电缆中，高清视频信号在传输的同时也传输功率，即高清图像和同轴信号与电源相结合，在同轴线上传输。



SMD Inductors	Power line 电源线	MDTA Series 			
EMC Components	Signal line 信号线	ACMA Series 	ACMV Series 	FBHA S Series 	FBHA Series 

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PRODUCTS LINE UP

FBA Series
Chip Ferrite Bead SMD Type

Size	Impendace @100 MHz(Ω)	Temp Rise Current(A)	DC Resistance (Ω)	Page
0402	30~1800	0.20~0.30	0.20~2.00	02
0603	22~2500	0.20~0.50	0.25~1.50	05
0805	7~2000	0.25~0.60	0.10~0.60	08
1206	26~600	0.40~0.50	0.20~0.40	11

FBHA Series
Chip Ferrite Bead High Current Type

Size	Impendace @100 MHz(Ω)	Temp Rise Current(A)	DC Resistance (Ω)	Page
0402	10~220	1.5~3.0	0.022~0.150	16
0603	30~1000	1.0~3.0	0.040~0.200	18
0805	22~1000	1.0~6.0	0.010~0.200	20
1206	30~600	1.0~6.0	0.010~0.200	23
1806	60~80	3.0~6.0	0.010~0.040	25
1812	80~150	5.0~6.0	0.010~0.020	26

ACMA Series
Common Mode Filters For Automotive Signal Line

Size	Inductance (μH)	Temp Rise Current(A)	DC Resistance (Ω)	Page
3225	11~100	0.15~0.30	0.4~1.5	28
4532	11~100	0.20~0.36	0.6~2.0	30

ACMV Series
Wire-wound Common Mode Choke

Size	Inductance (μH)	Temp Rise Current(A)	DC Resistance (Ω)	Page
3225	51~100	0.15~0.20	0.7~1.5	34
4532	51~100	0.15~0.20	1.0~2.0	36

BCMA Series
Common Mode Filters For Automotive Signal Line/Power Line

Size	Impendace @100 MHz(Ω)	Temp Rise Current(A)	DC Resistance (Ω)	Page
2012	67~1000	0.10~0.40	0.250~1.300	40
3216	90~2200	0.20~0.40	0.300~1.200	42
3225	90~1000	0.40~1.00	0.050~0.300	44
4532	90~600	2.50~4.00	0.050~0.060	45
5020	100~1500	1.50~6.00	0.013~0.056	46
7060	70~3000	0.90~15.00	0.005~0.075	48
9070	300~4000	1.80~6.00	0.006~0.100	50
9250	/	0.20~1.60	0.080~2.600	52
1009	5~4700	0.35~5.00	0.010~0.720	55
1211	300~2700	1.50~9.00	0.004~0.050	57

NRSA Series
SMD Power Inductors For Automotive

Size	Inductance (μH)	Temp Rise Current(A)	DC Resistance (Ω)	Page
201610	0.47~22.00	0.30~2.16	0.0410~1.5500	60
2520B	0.24~47.00	0.29~3.50	0.0280~2.0000	62
3012B	1.00~3.30	1.70~2.80	0.0430~0.1150	65
3015B	0.47~6.80	1.70~3.70	0.0220~0.1720	67
4014B	1.00~4.70	1.50~2.20	0.0450~0.1080	69
4018B	1.00~22.00	0.75~3.50	0.0320~0.4500	71
4030	0.68~47.00	0.72~4.60	0.0100~0.5300	73
5020	1.00~47.00	0.70~4.10	0.0200~0.4600	76
5040	1.00~100.00	0.72~5.00	0.0120~0.5600	79
6020	1.00~22.00	1.40~4.50	0.0190~0.2040	82
6028	1.00~100.00	0.72~5.20	0.0100~0.6050	84
6045	0.47~220.00	0.60~8.60	0.0068~0.9000	87
8040	1.00~220.00	0.85~8.50	0.0082~0.6100	92

PRODUCTS LINE UP

MDA Series
SMD Low Profile High Current Molded Inductor

Size	Inductance (μH)	Temp Rise Current(A)	DC Resistance (Ω)	Page
4020	0.10~10.00	2.4~16.0	0.00290~0.16500	96
5030	0.47~15.00	2.9~13.5	0.00520~0.14000	98
7030	0.15~47.00	1.5~30.0	0.00170~0.31800	100
7050	1.00~47.00	2.6~17.0	0.00560~0.27500	104
7054HT	1.50~100.00	1.8~11.5	0.00630~0.30300	107
1040	0.15~68.00	2.6~44.0	0.00050~0.19200	110
1050	0.36~47.00	4.5~34.0	0.00082~0.10600	113
1054HT	0.68~47.00	4.2~32.0	0.00180~0.08900	116
1350	0.47~68.00	4.3~38.0	0.00077~0.09500	118
1360	0.36~47.00	5.2~60.0	0.00065~0.07600	121
1365	0.47~68.00	5.8~42.0	0.00088~0.08200	123
1870	0.47~82.00	6.5~60.0	0.00070~0.06900	126
2313	1.00~47.0	17.0～70.0	0.00080~0.17300	129

MDTA Series
SMD Low Profile High Current Molded Inductor

Size	Impedance @100 MHz(Ω)	Temp Rise Current(A)	DC Resistance (Ω)	Page
20161A	0.10~4.70	1.6~8.5	0.0080~0.1900	136
25201B	0.10~10.00	1.2~12.0	0.0040~0.3300	138
32251B	0.22~6.80	2.2~9.5	0.0074~0.1770	140

DMMA Series
Molded Inductor

Size	Inductance (μH)	Temp Rise Current(A)	DC Resistance (Ω)	Page
7078	1.0~22.0	2.2~9.8	0.0065~0.1340	143
1094	3.3~22.0	3.6~9.0	0.0086~0.0560	14

FBA Series
Chip Ferrite Bead SMD Type

FEATURES

- Noise reduction solution for general signal line
- Various frequency characteristics with 2 materials of different features for countermeasures against everything from general signals to high-speed signals
- AEC-Q200 qualified
- Operating temperature:-55 to +150°C

APPLICATION

- Signal line filter for body controls, and car multimedia etc

FBA0402

P02

FBA0603

P05

FBA0805

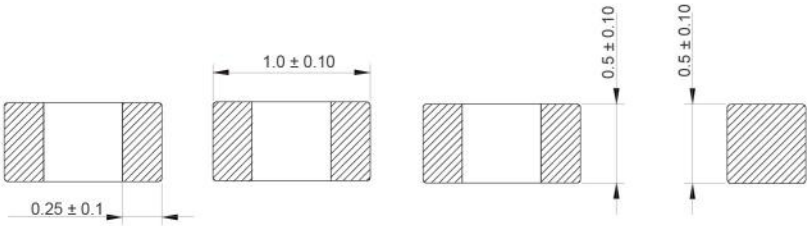
P08

FBA1206

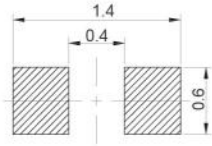
P11

FBA Series
Chip Ferrite Bead SMD Type
0402 Size

Dimensions: [mm]



Land Pattern: [mm]



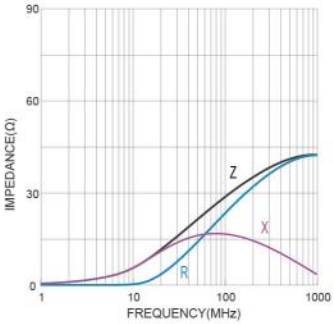
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance Max. (Ω)	Temperature Rise Current Max. (mA)
FBA0402-300-301R	30	±25%	0.20	300
FBA0402-600-101R	60	±25%	0.30	100
FBA0402-600-301R	60	±25%	0.25	300
FBA0402-121-800R	120	±25%	0.45	80
FBA0402-121-401R	120	±25%	0.30	400
FBA0402-151-101R	150	±25%	0.30	100
FBA0402-221-500R	220	±25%	0.60	50
FBA0402-221-101R	220	±25%	0.40	100
FBA0402-301-500R	300	±25%	0.75	50
FBA0402-301-101R	300	±25%	0.50	100
FBA0402-471-101R	470	±25%	0.65	100
FBA0402-601-800R	600	±25%	0.80	80
FBA0402-601-301R	600	±25%	0.80	300
FBA0402-102-500R	1000	±25%	1.20	50
FBA0402-102-251R	1000	±25%	1.25	250
FBA0402-152-201R	1500	±25%	1.50	200
FBA0402-182-201R	1800	±25%	2.00	200

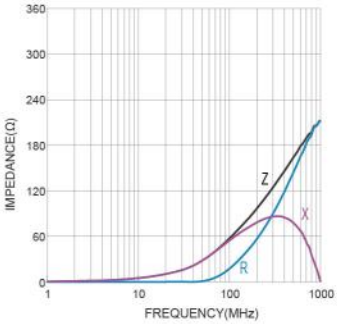
I_R refering to 20K self-heating above ambient temperature

Typical Electrical Characteristics

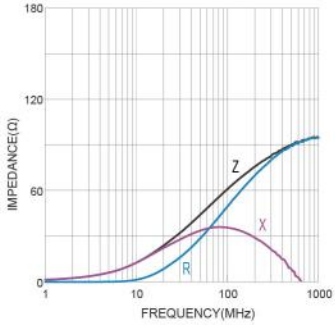
FBA0402-300-301R



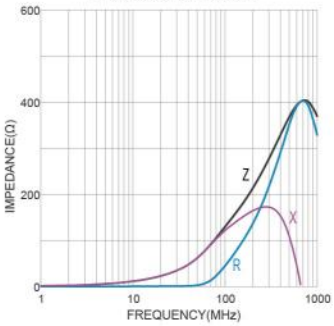
FBA0402-600-101R



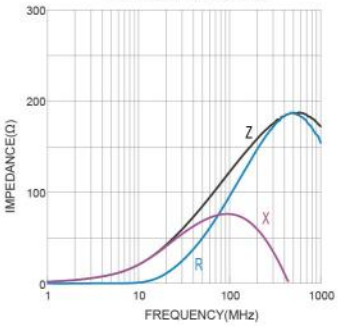
FBA0402-600-301R



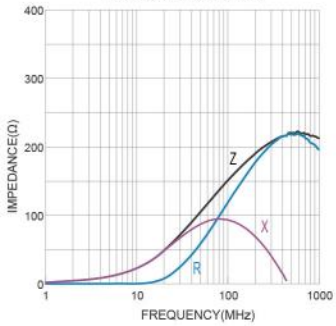
FBA0402-121-800R



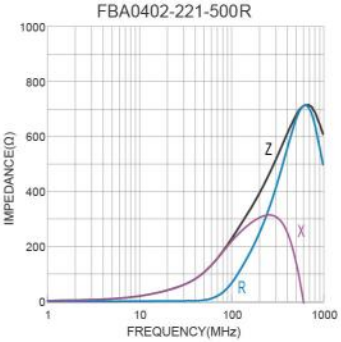
FBA0402-121-401R



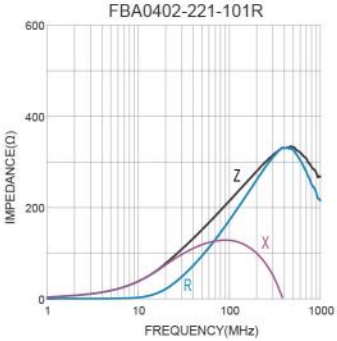
FBA0402-151-101R



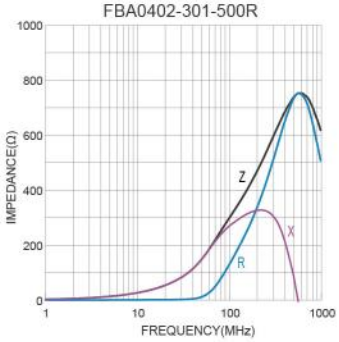
FBA0402-221-500R



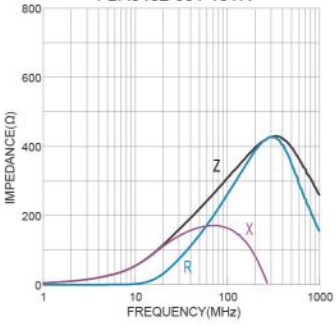
FBA0402-221-101R



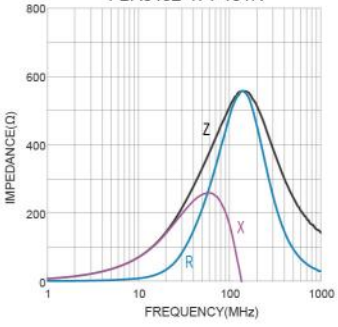
FBA0402-301-500R



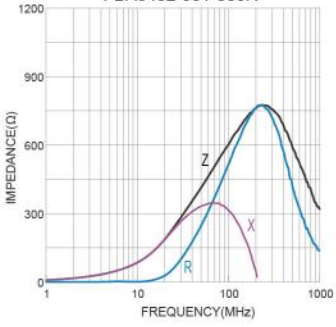
FBA0402-301-101R



FBA0402-471-101R

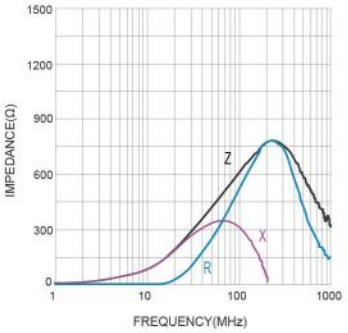


FBA0402-601-800R

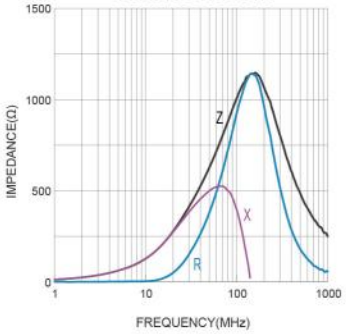


Typical Electrical Characteristics

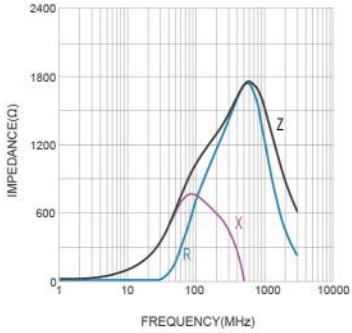
FBA0402-601-301R



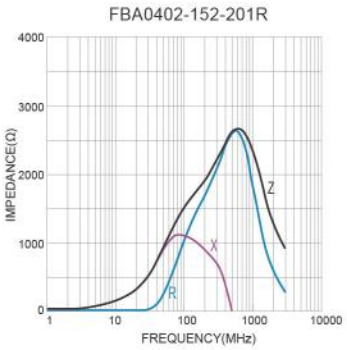
FBA0402-102-500R



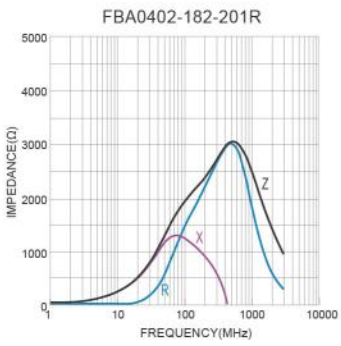
FBA0402-102-251R



FBA0402-152-201R

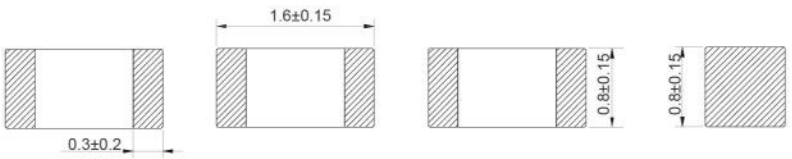


FBA0402-182-201R

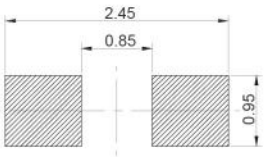


FBA Series
Chip Ferrite Bead SMD Type
0603 Size

Dimensions: [mm]



Land Pattern: [mm]

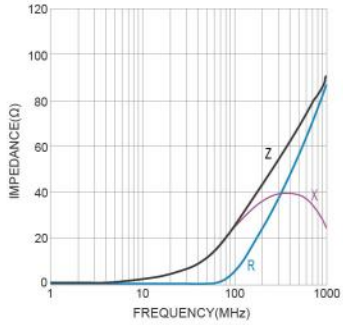


Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance Max. (Ω)	Temperature Rise Current Max. (mA)
FBA0603-220-501R	22	±25%	0.25	500
FBA0603-300-601R	30	±25%	0.25	600
FBA0603-300-701R	30	±25%	0.20	700
FBA0603-470-501R	47	±25%	0.20	500
FBA0603-600-701R	60	±25%	0.20	700
FBA0603-101-301R	100	±25%	0.20	300
FBA0603-121-301R	120	±25%	0.40	300
FBA0603-121-601R	120	±25%	0.25	600
FBA0603-151-601R	150	±25%	0.25	600
FBA0603-221-251R	220	±25%	0.60	250
FBA0603-221-551R	220	±25%	0.30	550
FBA0603-301-501R	300	±25%	0.35	500
FBA0603-471-351R	470	±25%	0.45	350
FBA0603-601-351R	600	±25%	0.50	350
FBA0603-102-201R	1000	±25%	0.70	200
FBA0603-152-201R	1500	±25%	1.00	200
FBA0603-202-201R	2000	±25%	1.20	200
FBA0603-252-201R	2500	±25%	1.50	200

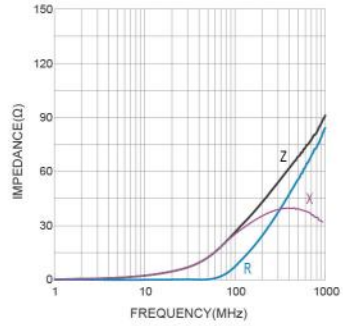
I_R refering to 20K self-heating above ambient temperature

Typical Electrical Characteristics

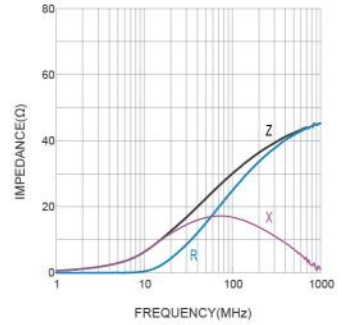
FBA0603-220-501R



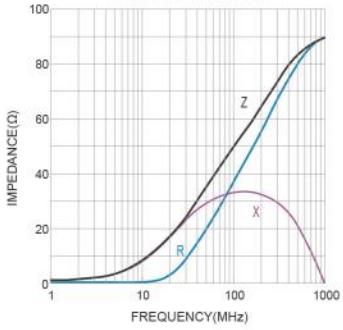
FBA0603-300-601R



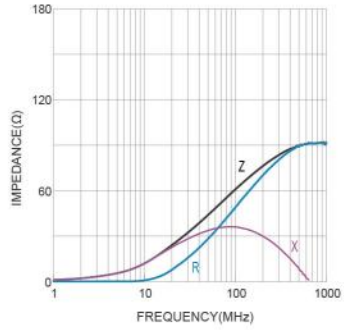
FBA0603-300-701R



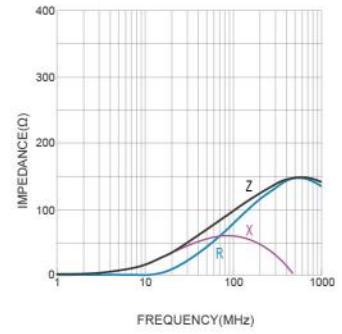
FBA0603-470-501R



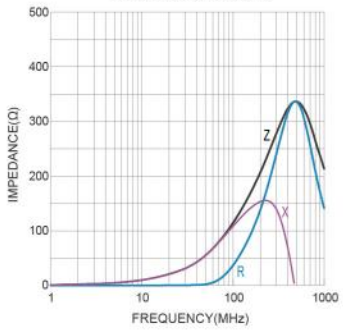
FBA0603-600-701R



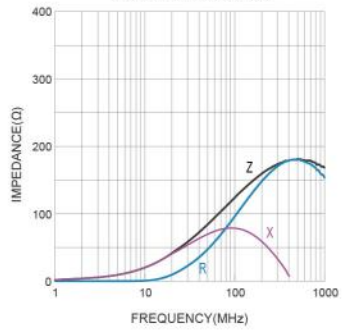
FBA0603-101-301R



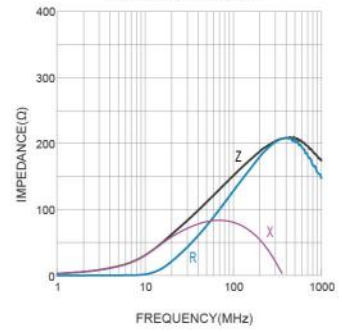
FBA0603-121-301R



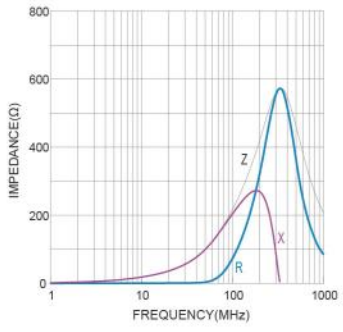
FBA0603-121-601R



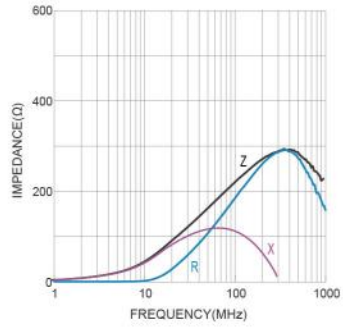
FBA0603-151-601R



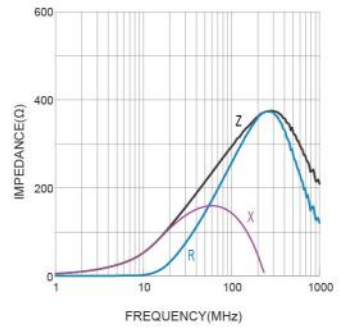
FBA0603-221-251R



FBA0603-221-551R

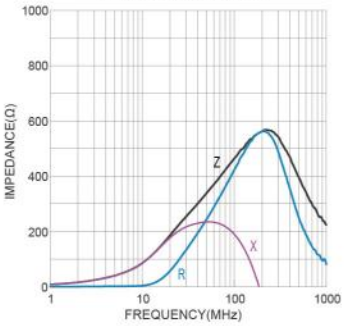


FBA0603-301-501R

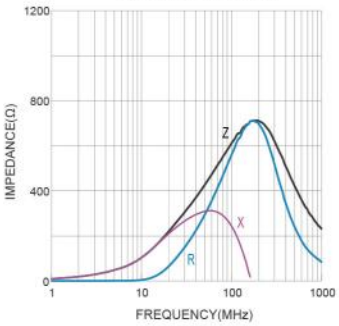


Typical Electrical Characteristics

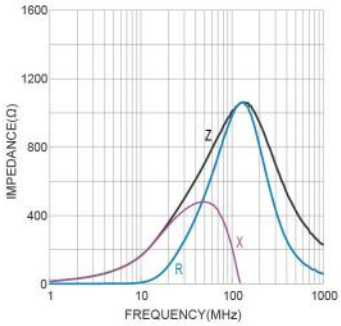
FBA0603-471-351R



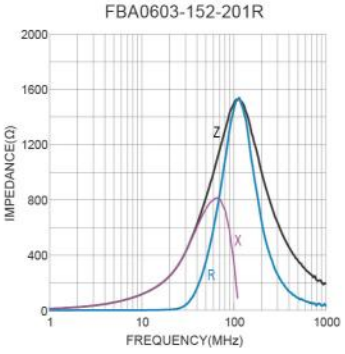
FBA0603-601-351R



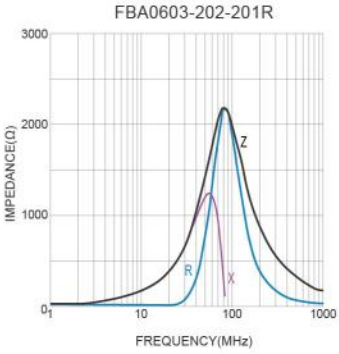
FBA0603-102-201R



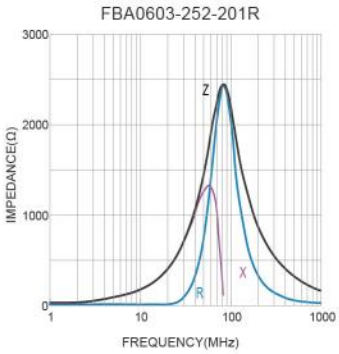
FBA0603-152-201R



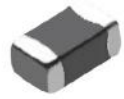
FBA0603-202-201R



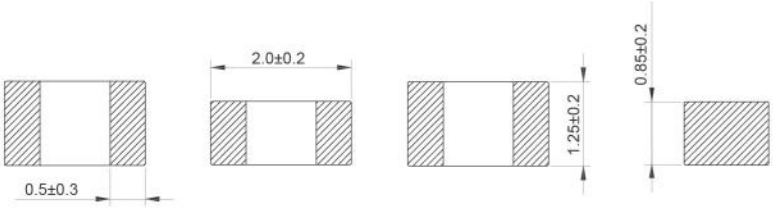
FBA0603-252-201R



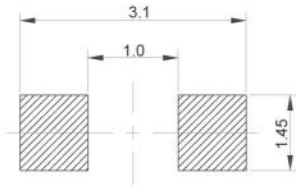
FBA Series
Chip Ferrite Bead SMD Type
0805 Size



Dimensions: [mm]



Land Pattern: [mm]



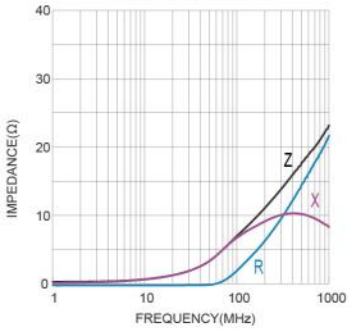
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance Max. (Ω)	Temperature Rise Current Max. (mA)
FBA0805-070-601R	7	±25%	0.10	600
FBA0805-110-901R	11	±25%	0.10	900
FBA0805-170-601R	17	±25%	0.10	600
FBA0805-260-601R	26	±25%	0.10	600
FBA0805-300-601R	30	±25%	0.10	600
FBA0805-400-601R	40	±25%	0.10	600
FBA0805-600-901R	60	±25%	0.10	900
FBA0805-121-801R	120	±25%	0.20	800
FBA0805-151-801R	150	±25%	0.20	800
FBA0805-221-751R	220	±25%	0.30	750
FBA0805-301-701R	300	±25%	0.30	700
FBA0805-471-701R	470	±25%	0.35	700
FBA0805-601-501R	600	±25%	0.40	500
FBA0805-102-401R	1000	±25%	0.45	400
FBA0805-102-501R	1000	±25%	0.35	500
FBA0805-152-351R	1500	±25%	0.50	350
FBA0805-202-251R	2000	±25%	0.60	250

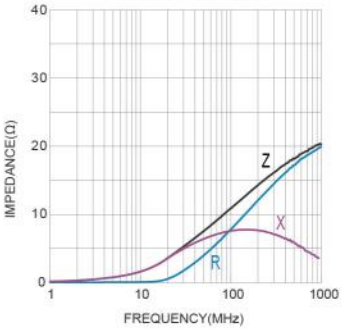
I_R refering to 20K self-heating above ambient temperature

Typical Electrical Characteristics

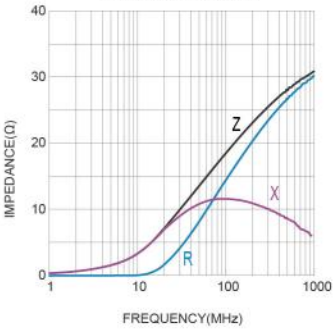
FBA0805-070-601R



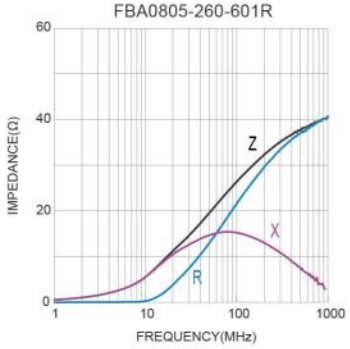
FBA0805-110-901R



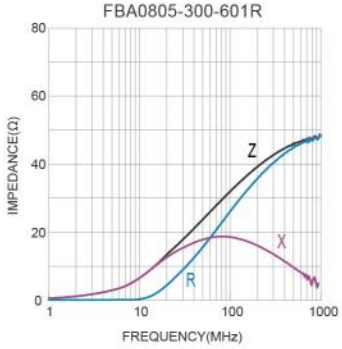
FBA0805-170-601R



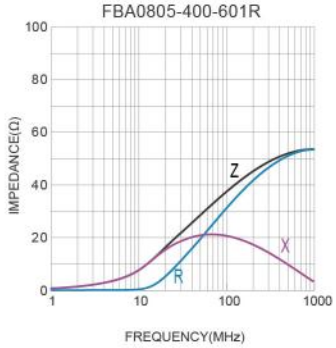
FBA0805-260-601R



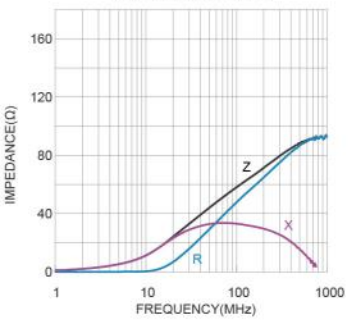
FBA0805-300-601R



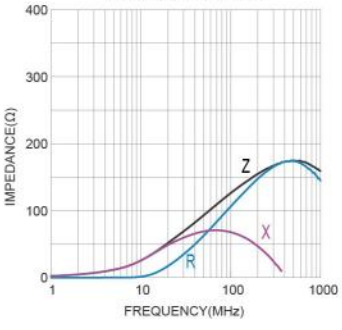
FBA0805-400-601R



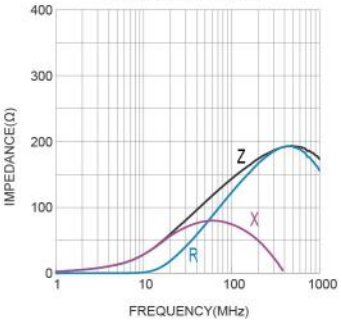
FBA0805-600-901R



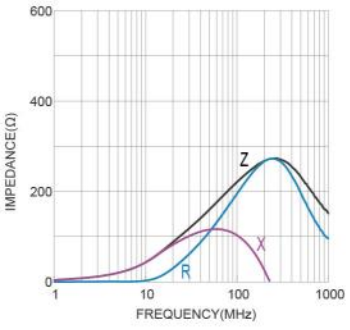
FBA0805-121-801R



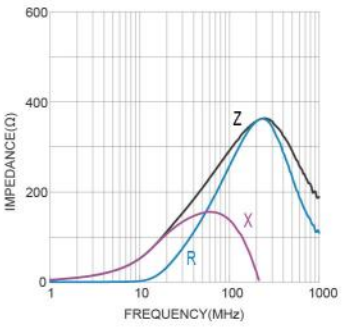
FBA0805-151-801R



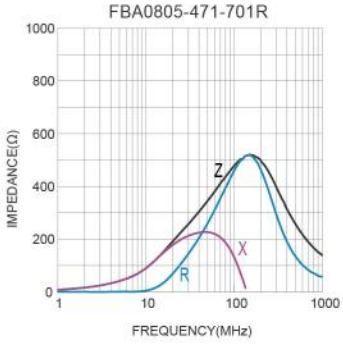
FBA0805-221-751R



FBA0805-301-701R

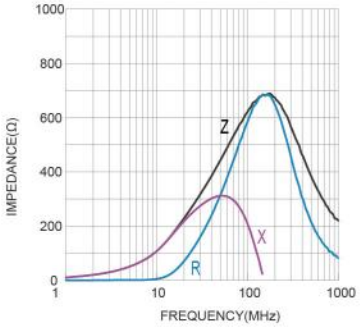


FBA0805-471-701R

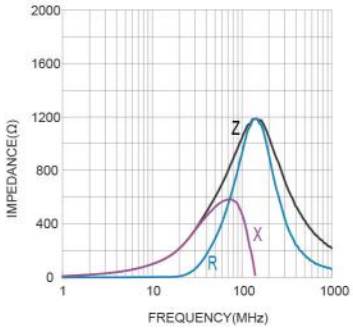


Typical Electrical Characteristics

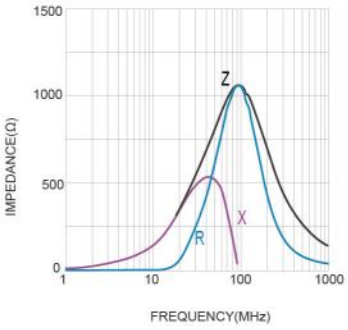
FBA0805-601-501R



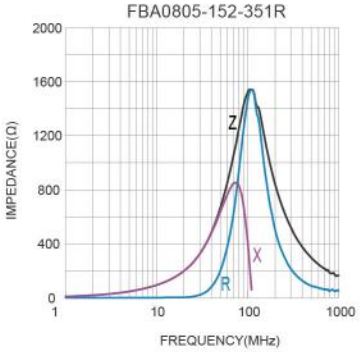
FBA0805-102-401R



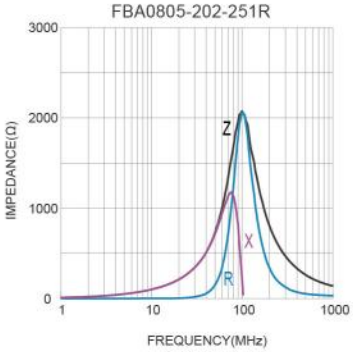
FBA0805-102-501R



FBA0805-152-351R

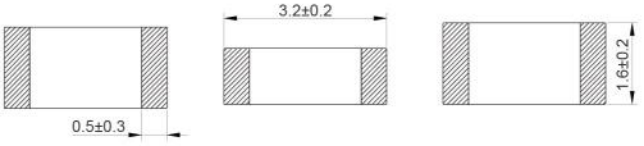


FBA0805-202-251R

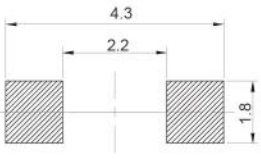


FBA Series
Chip Ferrite Bead SMD Type
1206 Size

Dimensions: [mm]



Land Pattern: [mm]



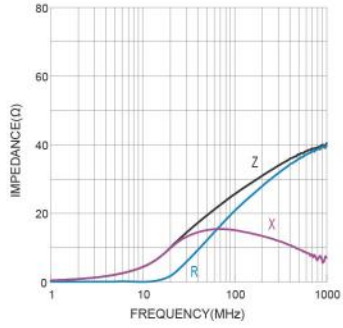
Electrical Properties

Part No	Z @ 100 MHz (Ω)	Tolerance	DC Resistance (Ω)	Temperature Rise Current (mA)
FBA1206-260-501R	26	±25%	0.20	500
FBA1206-310-501R	31	±25%	0.20	500
FBA1206-420-501R	42	±25%	0.20	500
FBA1206-500-501R	50	±25%	0.20	500
FBA1206-700-501R	70	±25%	0.20	500
FBA1206-900-501R	90	±25%	0.20	500
FBA1206-121-901R	120	±25%	0.15	900
FBA1206-151-901R	150	±25%	0.15	900
FBA1206-201-601R	200	±25%	0.35	600
FBA1206-221-701R	220	±25%	0.35	700
FBA1206-301-701R	300	±25%	0.35	700
FBA1206-471-401R	470	±25%	0.35	400
FBA1206-601-401R	600	±25%	0.40	400

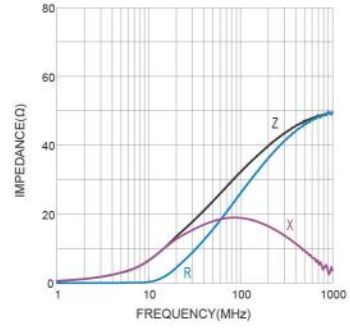
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=20°C

Typical Electrical Characteristics

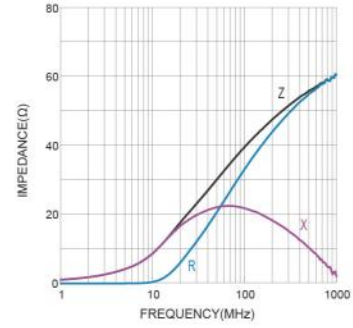
FBA1206-260-501R



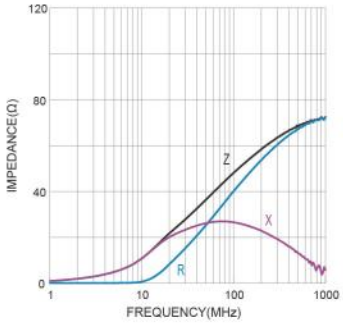
FBA1206-310-501R



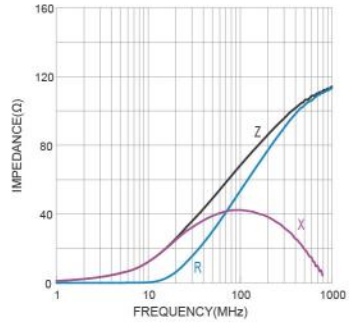
FBA1206-420-501R



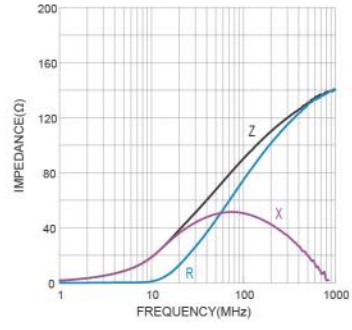
FBA1206-500-501R



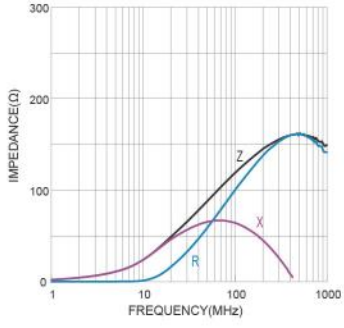
FBA1206-700-501R



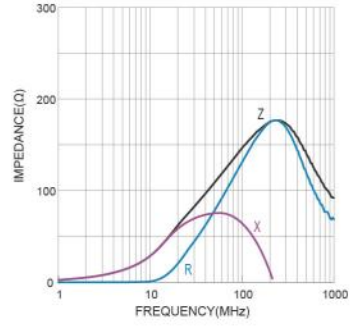
FBA1206-900-501R



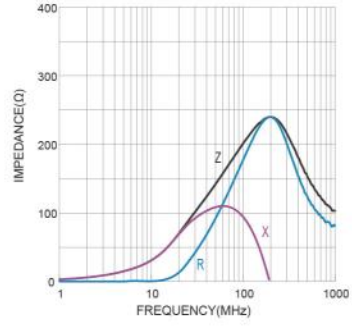
FBA1206-121-901R



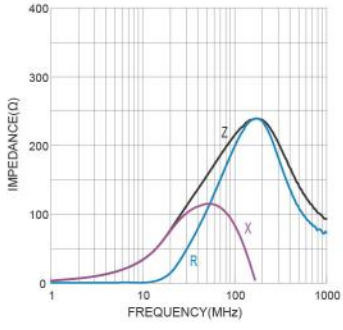
FBA1206-151-901R



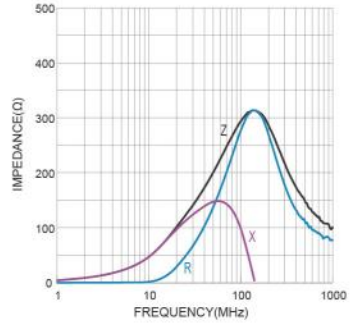
FBA1206-201-601R



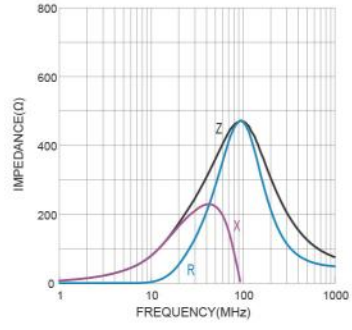
FBA1206-221-701R



FBA1206-301-701R

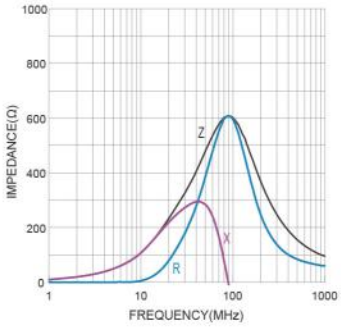


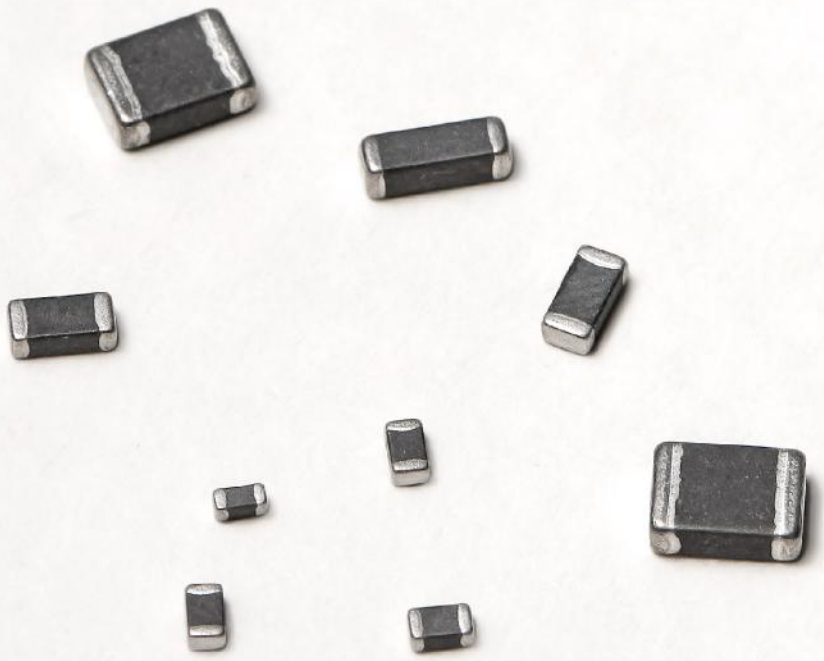
FBA1206-471-401R



Typical Electrical Characteristics

FBA1206-601-401R





FBHA Series

Chip Ferrite Bead High Current Type

FEATURES

- Noise reduction solution for power line
- Compared to the FBA series, has low direct current resistance for compatibility with large currents, optimal for low power consumption. Various frequency characteristics with 2 materials of different features for countermeasures against everything from general signals to high-speed signals
- Performs well even in signal lines where low direct current resistance is required
- AEC-Q200 qualified
- Operating temperature:-55 to +150°C

APPLICATION

- Power line filter for body controls,and car multimedia etc

FBHA0402 P16

FBHA0603 P18

FBHA0805 P20

FBHA1206 P23

FBHA1806 P25

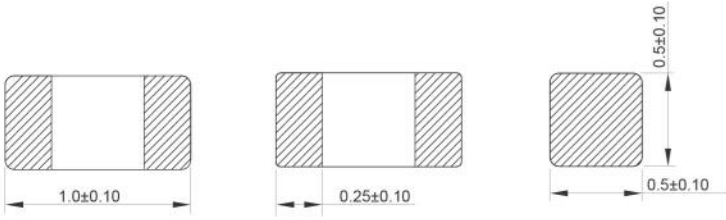
FBHA1812 P26

FBHA Series

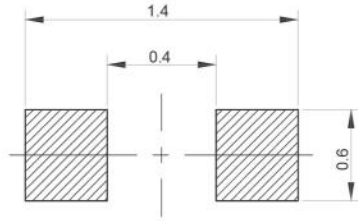
Chip Ferrite Bead High Current Type

0402 Size

Dimensions: [mm]



Land Pattern: [mm]



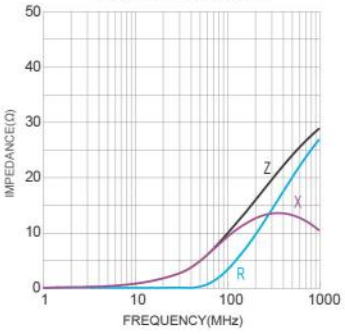
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance (Ω)	Temperature Rise Current (mA)
FBHA0402-100-252R	10	±25%	0.050	2500
FBHA0402-330-302R	33	±25%	0.022	3000
FBHA0402-600-252R	60	±25%	0.032	2500
FBHA0402-800-232R	80	±25%	0.038	2300
FBHA0402-121-202R	120	±25%	0.095	2000
FBHA0402-221-152R	220	±25%	0.150	1500

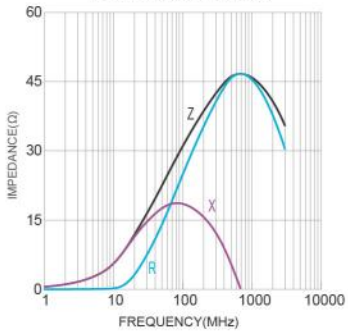
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

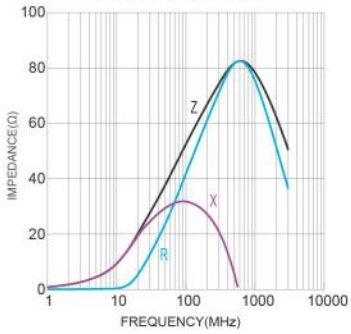
FBHA0402-100-252R



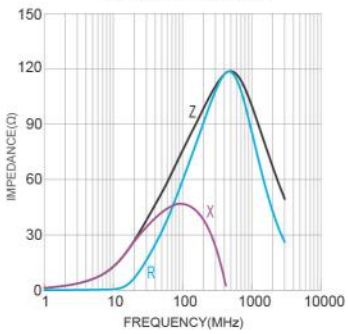
FBHA0402-330-302R



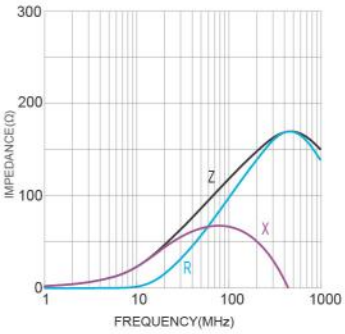
FBHA0402-600-252R



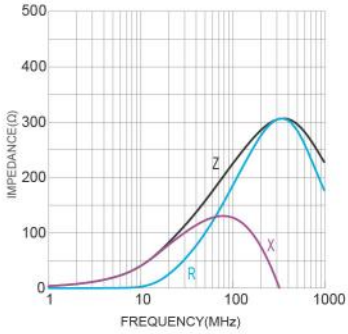
FBHA0402-800-232R



FBHA0402-121-202R



FBHA0402-221-152R

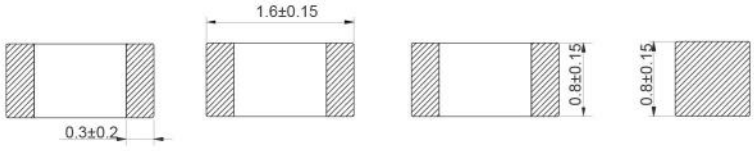


FBHA Series

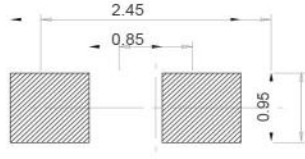
Chip Ferrite Bead High Current Type

0603 Size

Dimensions: [mm]



Land Pattern: [mm]



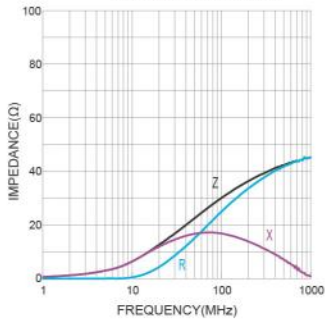
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance (Ω)	Temperature Rise Current (mA)
FBHA0603-300-302R	30	±25%	0.04	3000
FBHA0603-800-302R	80	±25%	0.04	3000
FBHA0603-101-302R	100	±25%	0.04	3000
FBHA0603-121-202R	120	±25%	0.10	2000
FBHA0603-121-302R	120	±25%	0.04	3000
FBHA0603-151-202R	150	±25%	0.10	2000
FBHA0603-221-202R	220	±25%	0.10	2000
FBHA0603-301-102R	300	±25%	0.20	1000
FBHA0603-331-152R	330	±25%	0.10	1500
FBHA0603-471-102R	470	±25%	0.20	1000
FBHA0603-601-102R	600	±25%	0.20	1000
FBHA0603-102-102R	1000	±25%	0.20	1000

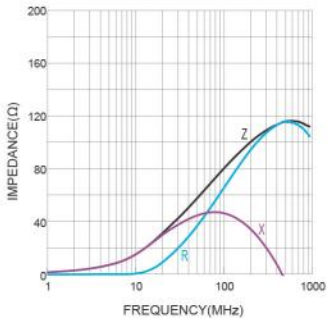
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

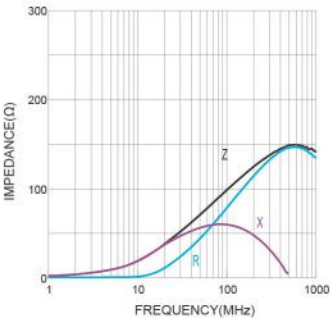
FBHA0603-300-302R



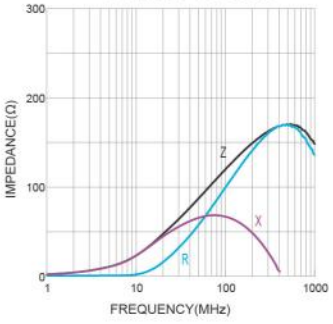
FBHA0603-800-302R



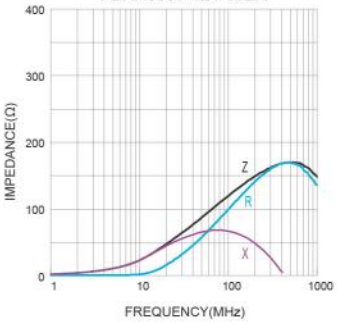
FBHA0603-101-302R



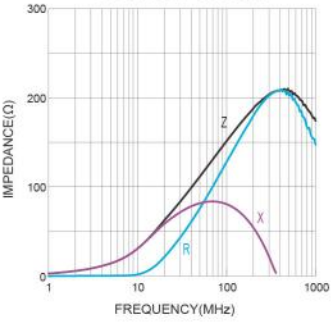
FBHA0603-121-202R



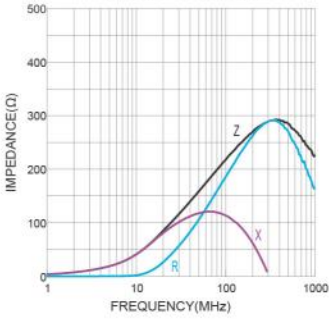
FBHA0603-121-302R



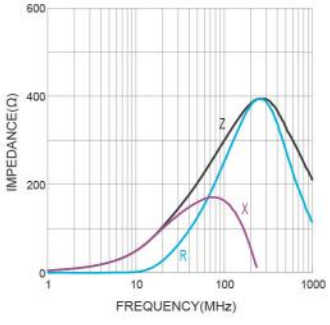
FBHA0603-151-202R



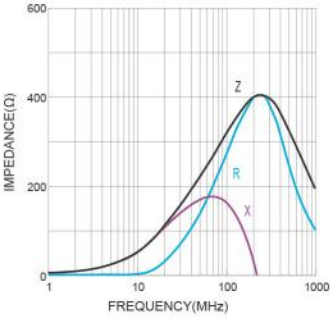
FBHA0603-221-202R



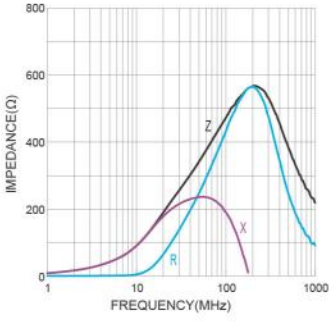
FBHA0603-301-102R



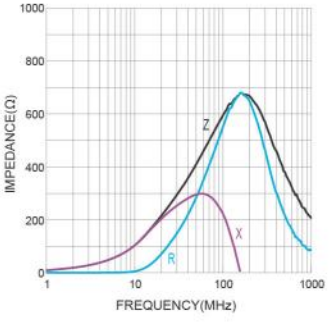
FBHA0603-331-152R



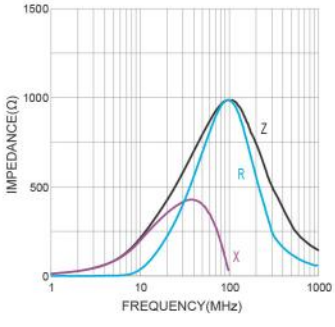
FBHA0603-471-102R



FBHA0603-601-102R



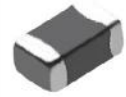
FBHA0603-102-102R



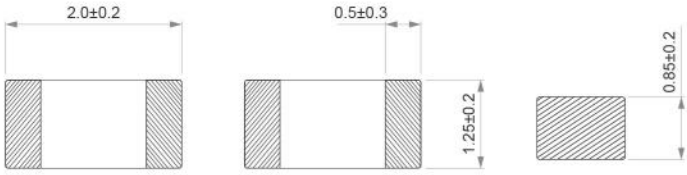
FBHA Series

Chip Ferrite Bead High Current Type

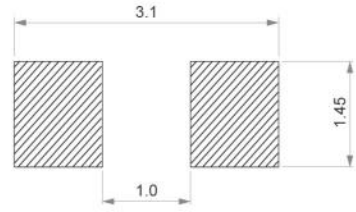
0805 Size



Dimensions: [mm]



Land Pattern: [mm]



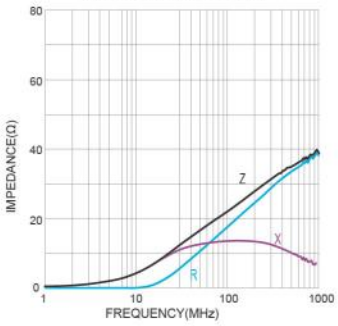
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance (Ω)	Temperature Rise Current (mA)
FBHA0805-220-602R	22	±25%	0.01	6000
FBHA0805-300-302R	30	±25%	0.04	3000
FBHA0805-300-602R	30	±25%	0.01	6000
FBHA0805-800-302R	80	±25%	0.04	3000
FBHA0805-101-102R	100	±25%	0.15	1000
FBHA0805-101-502R	100	±25%	0.02	5000
FBHA0805-121-202R	120	±25%	0.10	2000
FBHA0805-151-202R	150	±25%	0.10	2000
FBHA0805-221-202R	220	±25%	0.10	2000
FBHA0805-221-302R	220	±25%	0.04	3000
FBHA0805-301-102R	300	±25%	0.20	1000
FBHA0805-331-252R	330	±25%	0.05	2500
FBHA0805-471-102R	470	±25%	0.20	1000
FBHA0805-601-102R	600	±25%	0.20	1000
FBHA0805-601-202R	600	±25%	0.10	2000
FBHA0805-102-102R	1000	±25%	0.20	1000
FBHA0805-102-152R	1000	±25%	0.15	1500

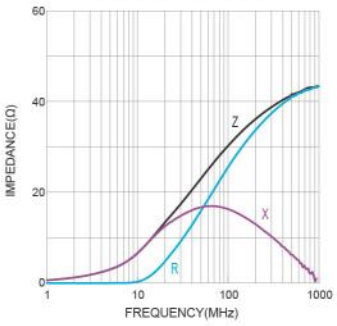
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

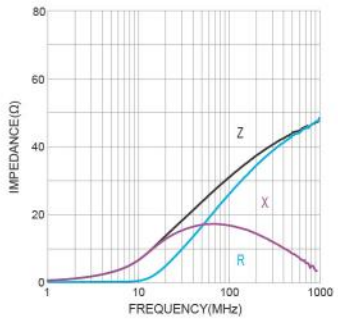
FBHA0805-220-602R



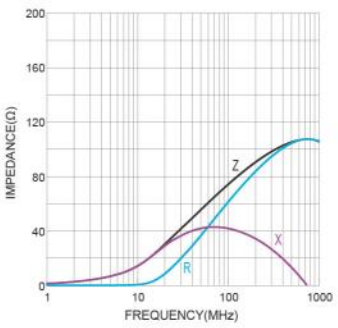
FBHA0805-300-302R



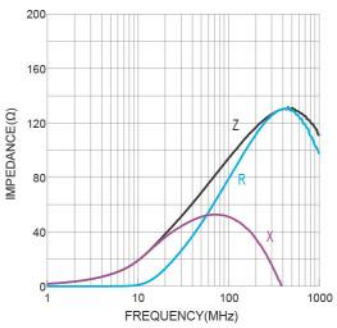
FBHA0805-300-602R



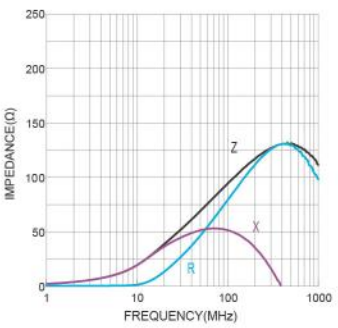
FBHA0805-800-302R



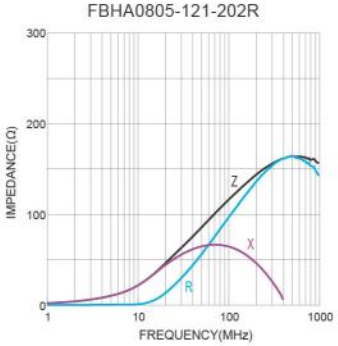
FBHA0805-101-102R



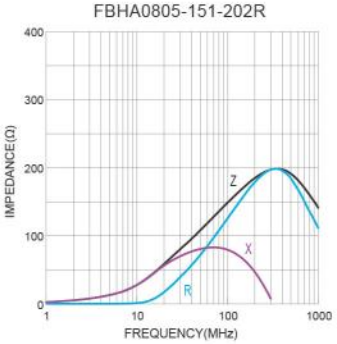
FBHA0805-101-502R



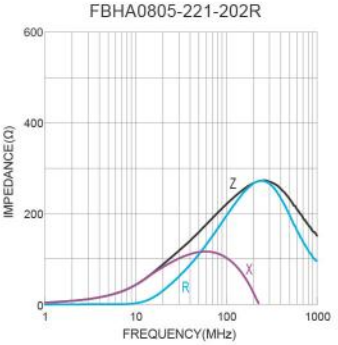
FBHA0805-121-202R



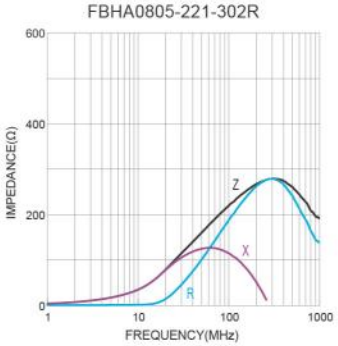
FBHA0805-151-202R



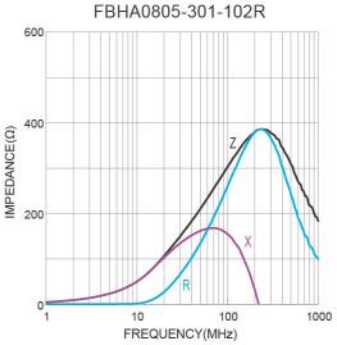
FBHA0805-221-202R



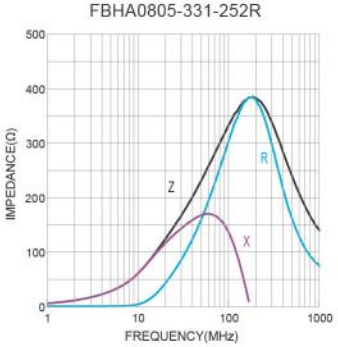
FBHA0805-221-302R



FBHA0805-301-102R

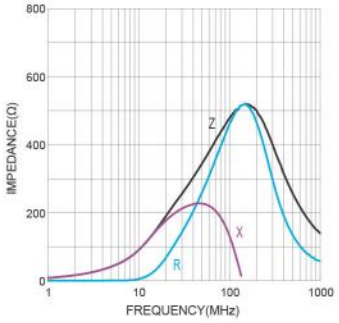


FBHA0805-331-252R

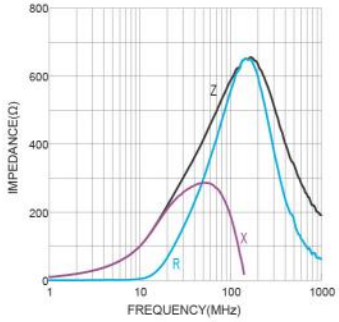


Typical Electrical Characteristics

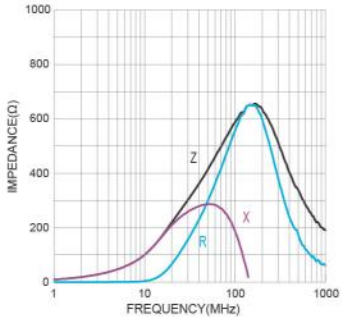
FBHA0805-471-102R



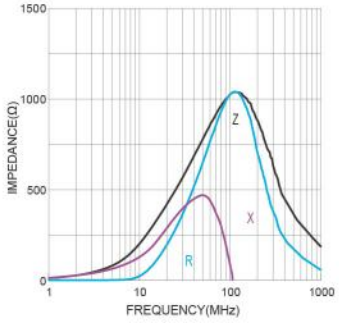
FBHA0805-601-102R



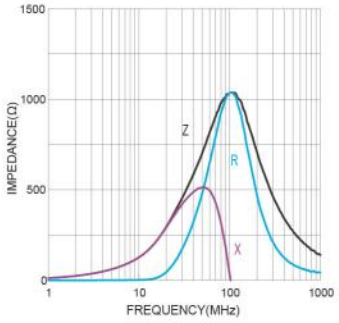
FBHA0805-601-202R



FBHA0805-102-102R

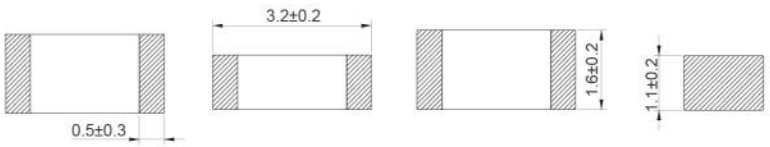


FBHA0805-102-152R

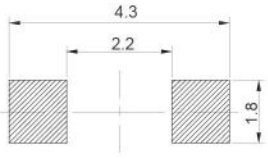


FBHA Series
Chip Ferrite Bead High Current Type
1206 Size

Dimensions: [mm]



Land Pattern: [mm]



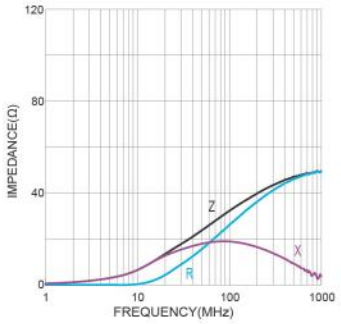
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance (Ω)	Temperature Rise Current (mA)
FBHA1206-300-302R	30	±25 %	0.04	3000
FBHA1206-330-602R	33	±25 %	0.01	6000
FBHA1206-500-302R	50	±25 %	0.04	3000
FBHA1206-800-302R	80	±25 %	0.04	3000
FBHA1206-121-202R	120	±25 %	0.10	2000
FBHA1206-121-302R	120	±25 %	0.03	3000
FBHA1206-151-202R	150	±25 %	0.10	2000
FBHA1206-301-102R	300	±25 %	0.20	1000
FBHA1206-471-102R	470	±25 %	0.20	1000
FBHA1206-501-302R	500	±25 %	0.04	3000
FBHA1206-601-202R	600	±25 %	0.10	2000
FBHA1206-601-302R	600	±25 %	0.04	3000

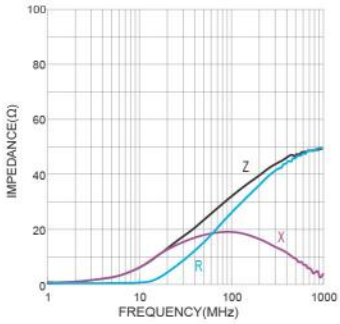
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

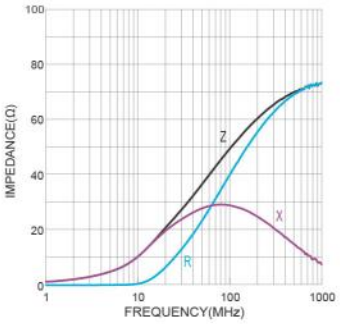
FBHA1206-300-302R



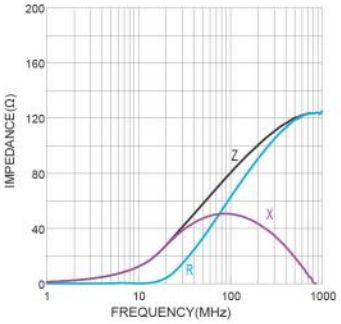
FBHA1206-330-602R



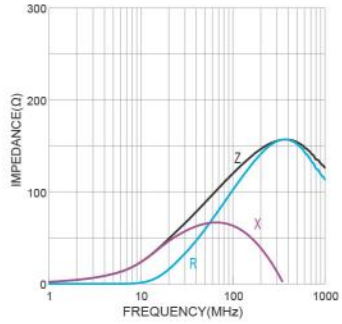
FBHA1206-500-302R



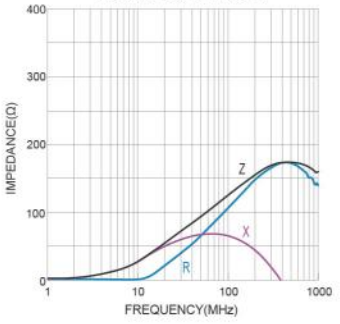
FBHA1206-800-302R



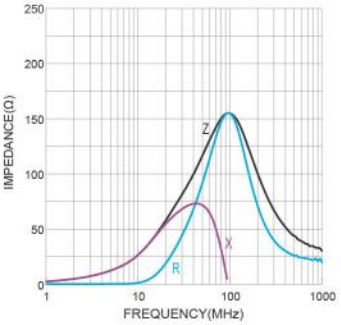
FBHA1206-121-202R



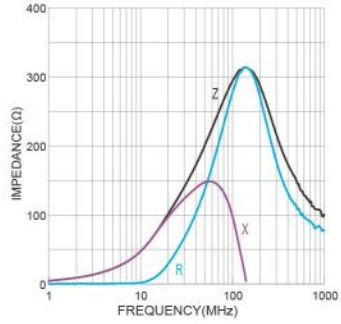
FBHA1206-121-302R



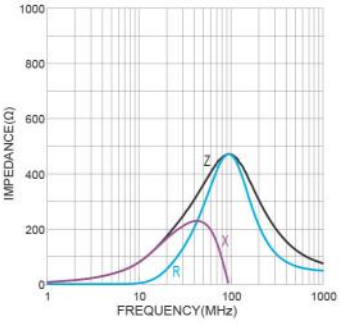
FBHA1206-151-202R



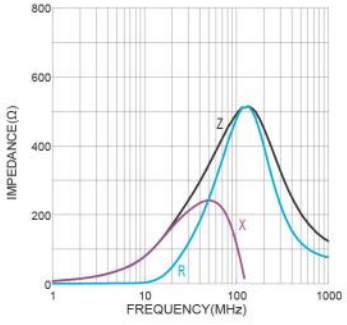
FBHA1206-301-102R



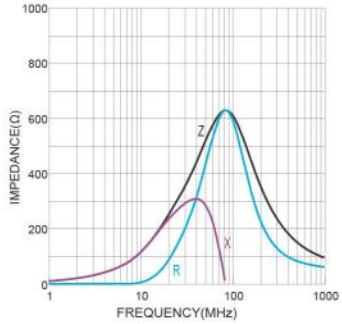
FBHA1206-471-102R



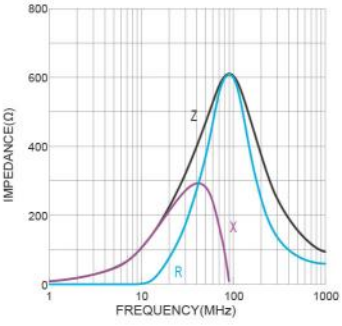
FBHA1206-501-302R



FBHA1206-601-202R



FBHA1206-601-302R

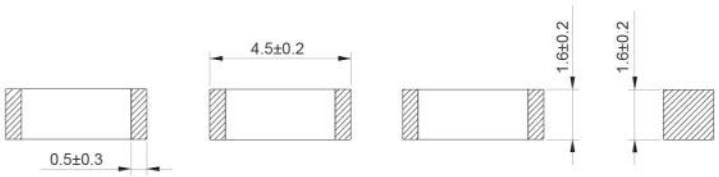


FBHA Series

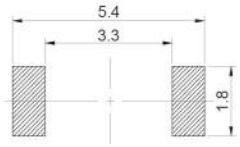
Chip Ferrite Bead High Current Type

1806 Size

Dimensions: [mm]



Land Pattern: [mm]



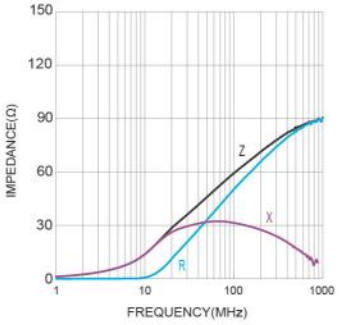
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance (Ω)	Temperature Rise Current (mA)
FBHA1806-600-602R	60	±25%	0.01	6000
FBHA1806-800-302R	80	±25%	0.04	3000

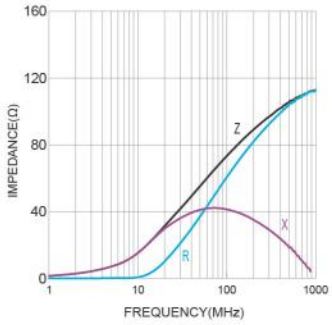
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

FBHA1806-600-602R



FBHA1806-800-302R

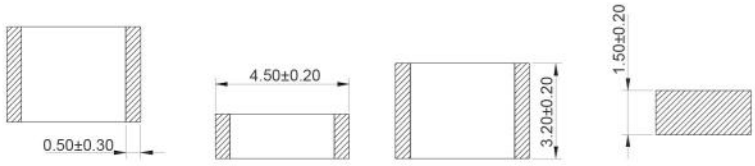


FBHA Series

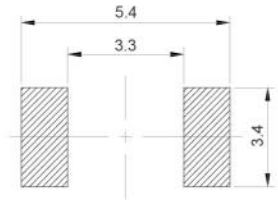
Chip Ferrite Bead High Current Type

1812 Size

Dimensions: [mm]



Land Pattern: [mm]



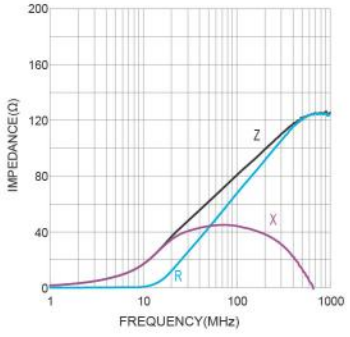
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	DC Resistance (Ω)	Temperature Rise Current (mA)
FBHA1812-800-602R	80	±25 %	0.01	6000
FBHA1812-151-502R	150	±25 %	0.02	5000

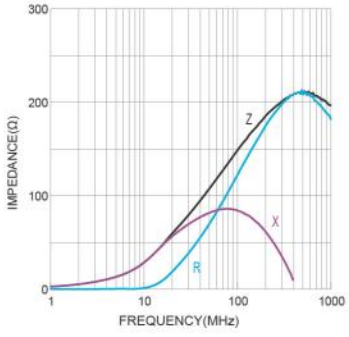
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

FBHA1812-800-602R



FBHA1812-151-502R



ACMA Series

Common Mode Filters For Automotive Signal Line

FEATURES

- Compact products, whose characteristics are equivalent to that of conventional products
- Common mode filters for Signal Line
- Operating temperature range: -55 to +150°C
- AEC-Q200 qualified

APPLICATION

- CAN-BUS, FlexRay system

ACMA3225

P28

ACMA4532

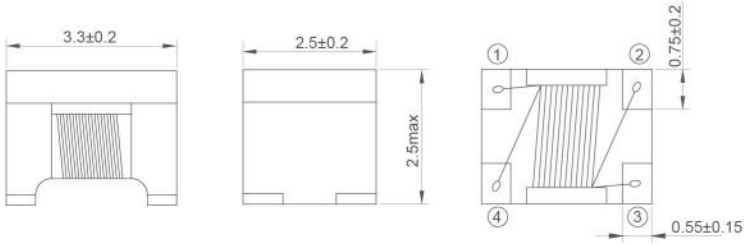
P30

ACMA Series

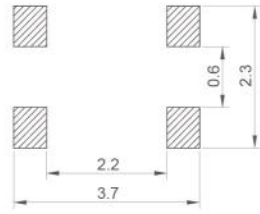
Common Mode Filters For Automotive Signal Line

3225 Size

Dimensions: [mm]



Land Pattern: [mm]



Schematic

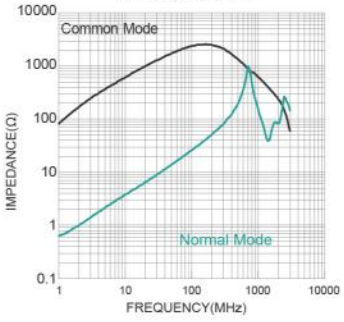
Electrical Properties

Part No	Z @ 10 MHz		L @ 100kHz/0.1V (μH)	Tol.	I_R Max. (mA)	R_{DC} Max. (Ω)	V_{DC} (Volts)	IR (MΩ)
	Min. (Ω)	Typ. (Ω)						
ACMA3225-110Y	300	550	11	+50/-30%	300	0.4	80	10
ACMA3225-220Y	500	1100	22	+50/-30%	250	0.5	80	10
ACMA3225-510Y	1000	2600	51	+50/-30%	200	0.7	80	10
ACMA3225-101Y	2200	5100	100	+50/-30%	150	1.5	80	10

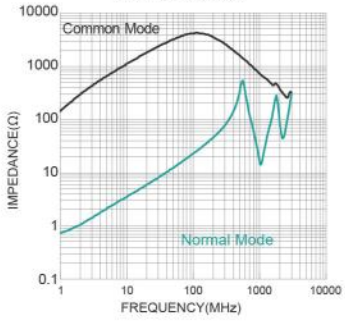
I_R efering to 20K self-heating above ambient temperature

Typical Electrical Characteristics

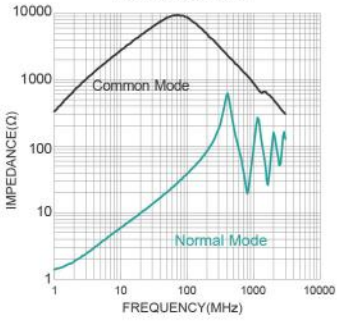
ACMA3225-110Y



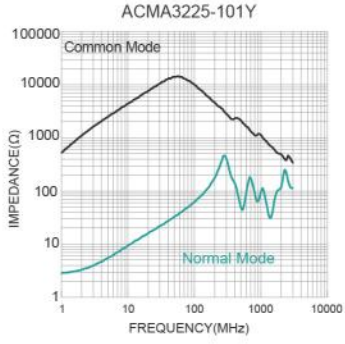
ACMA3225-220Y



ACMA3225-510Y



ACMA3225-101Y

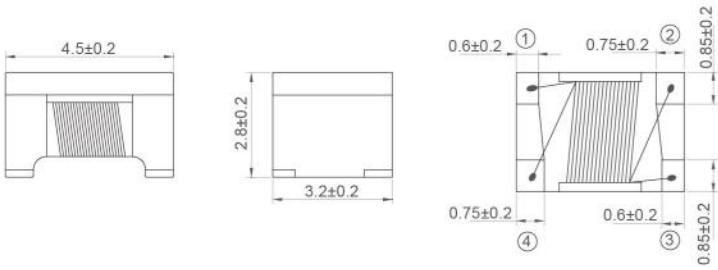


ACMA Series

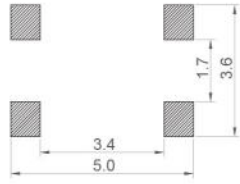
Common Mode Filters For Automotive Signal Line

4532 Size

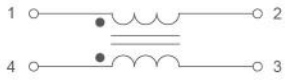
Dimensions: [mm]



Land Pattern: [mm]



Schematic



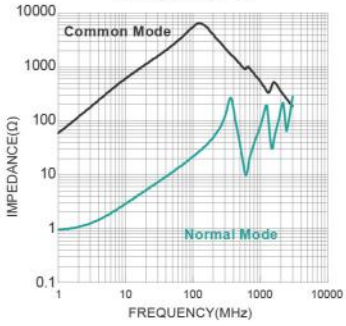
Electrical Properties

Part No	Z @ 10 MHz		L @ 100kHz/0.1V (μH)	Tol.	I_R Max. (mA)	R_{DC} Max. (Ω)	V_{DC} (Volts)	IR (MΩ)
	Min. (Ω)	Typ. (Ω)						
ACMA4532-110Y	300	600	11	+50%/-30%	360	0.6	50	10
ACMA4532-220Y	500	1200	22	+50%/-30%	310	1.0	50	10
ACMA4532-510Y	1000	2800	51	+50%/-30%	230	1.0	50	10
ACMA4532-101Y	2000	5800	100	+50%/-30%	200	2.0	50	10

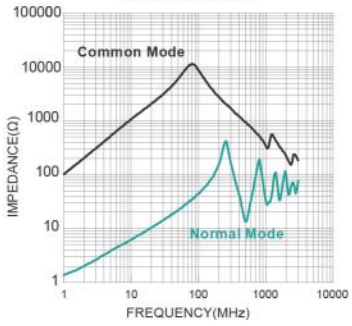
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=20°C

Typical Electrical Characteristics

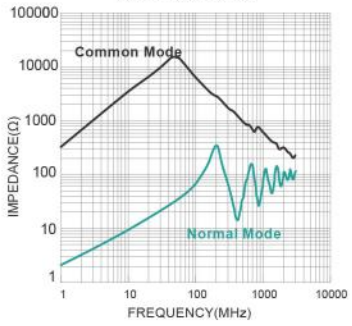
ACMA4532-110Y



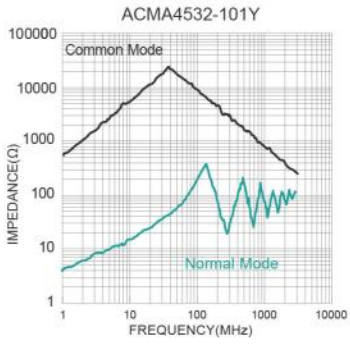
ACMA4532-220Y

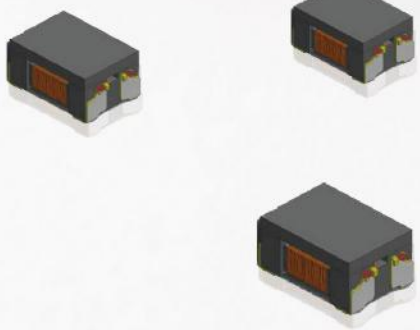


ACMA4532-510Y



ACMA4532-101Y





ACMV Series

Wire-wound Common Mode Choke

FEATURES

- Suitable for lead-free reflow soldering
- Operating temperature-40℃~150℃
- AEC-Q200 qualified

APPLICATION

- CAN-FD
- Automotive CAN-BUS, FlexRay system
- Industrial field bus systems

ACMV3225

P34

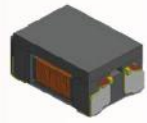
ACMV4532

P36

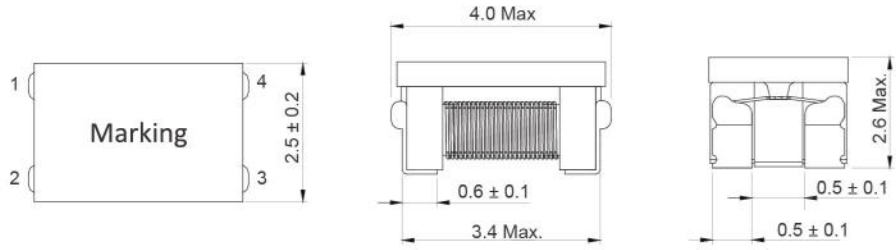
ACMV Series

Wire-wound Common Mode Choke

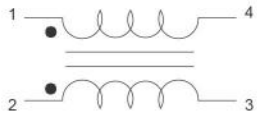
3225 Size



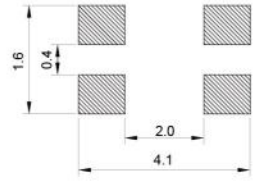
Dimensions: [mm]



Schematic



Land Pattern: [mm]



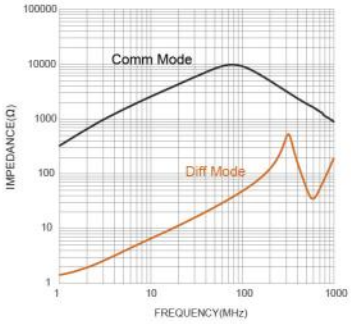
Electrical Properties

Part No	Common Mode Impedance @ 10 MHz/0.1V (Ω)		Common Mode Inductance @ 100kHz/0.1V +50%/-30% (μH)	DCR Max. (Ω)	Rated Current Max. (mA)	Rated Voltage Max. (Vdc)	Insulation Resistance Min. (MΩ)
	Min.	Typ.					
ACMV3225-510Y	1000	2600	51	0.7	200	80	10
ACMV3225-101Y	2200	5100	100	1.5	150	80	10

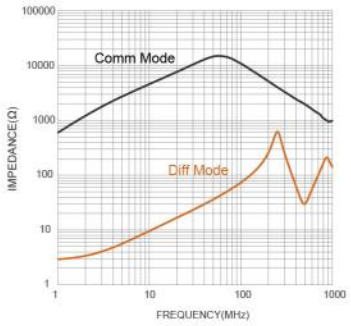
All test data is referenced to 25℃ ambient.

Typical Electrical Characteristics

ACMV3225-510Y



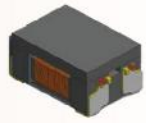
ACMV3225-101Y



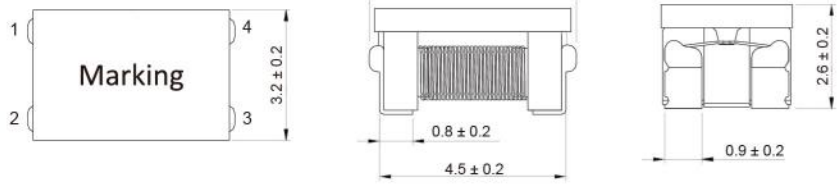
ACMV Series

Wire-wound Common Mode Choke

4532 Size

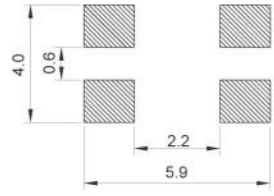


Dimensions: [mm]



Schematic

Land Pattern: [mm]



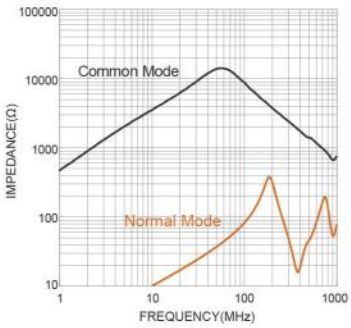
Electrical Properties

Part No	Common Mode Impedance @ 10 MHz/0.1V (Ω)		Common Mode Inductance @ 100kHz/0.1V +50%/-30% (μH)	Tolerance	DCR Max. (Ω)	Rated Current Max. (mA)	Rated Voltage Max. (Vdc)	Insulation Resistance Min. (MΩ)
	Min.	Typ.						
ACMV4532-510Y	1000	3000	51	+50%/-30%	1.0	200	80	10
ACMV4532-101Y	2000	6000	100	+50%/-30%	2.0	150	80	10
ACMV4532-101Y-FD	2000	5000	100	±40%	2.0	150	80	10

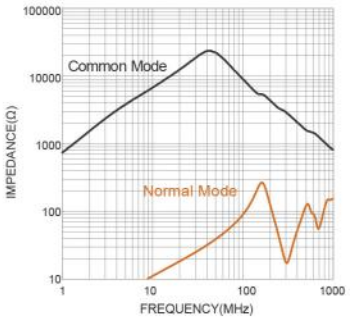
All test data is referenced to 25℃ ambient.

Typical Electrical Characteristics

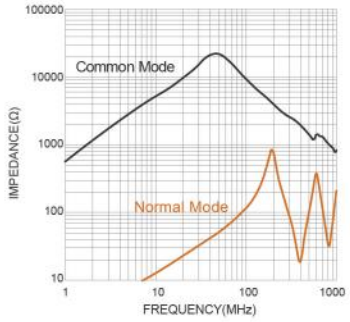
ACMV4532-510Y

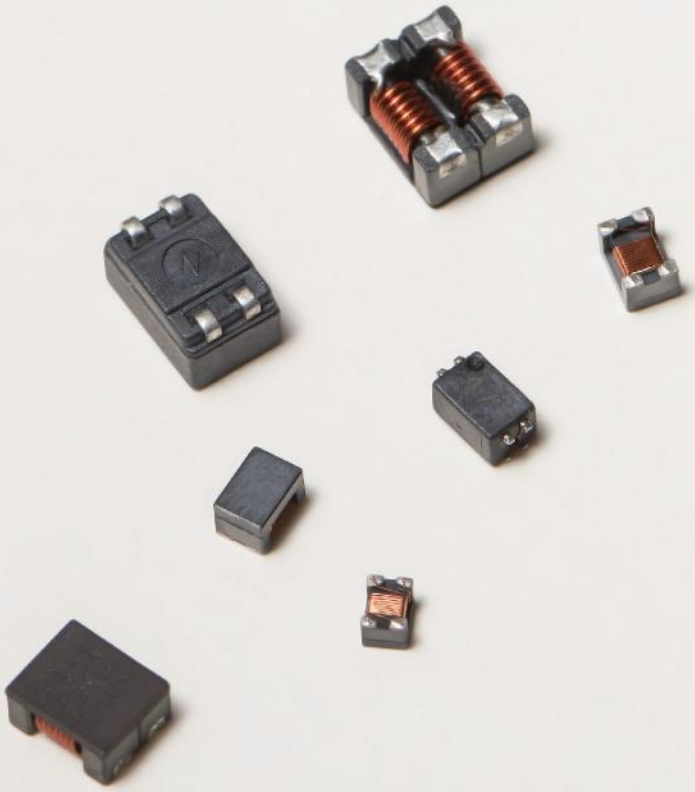


ACMV4532-101Y



ACMV4532-101Y-FD





BCMA Series

Common Mode Filters For Automotive Signal Line/Power Line

FEATURES

- Impedance variation: Extensive lineup are available for compatibility with various usages
- Common mode filters for Signal Line and Power Line
- Operating temperature range:-40 to +125°C
- AEC-Q200 qualified

APPLICATION

- Radiated noise suppression for car multimedia interfaces (MOST, USB2.0, IDB-1394, etc.)

BCMA2012 P40

BCMA3216 P42

BCMA3225 P44

BCMA4532 P45

BCMA5020 P46

BCMA7060 P48

BCMA9070 P50

BCMA9250 P52

BCMA1009 P55

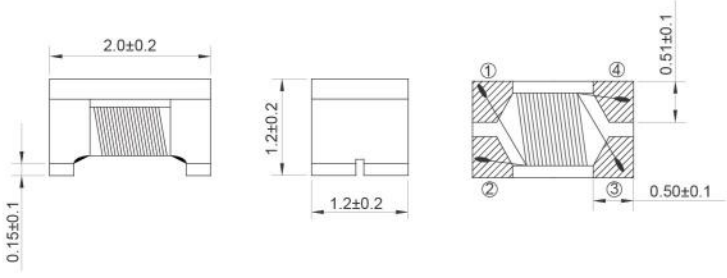
BCMA1211 P57

BCMA Series

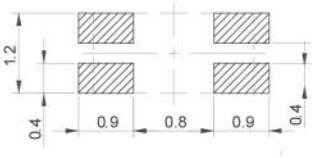
Common Mode Filters For Automotive Signal Line

2012 Size

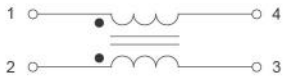
Dimensions: [mm]



Land Pattern: [mm]



Schematic



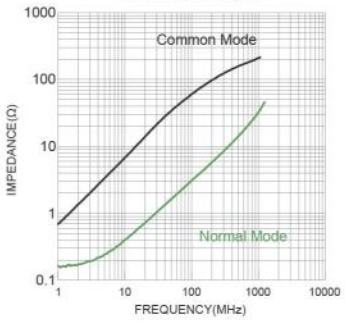
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Tolerance	Temperature Rise Current Max. (mA)	DC Resistance Max. (Ω)	Rated voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA2012-670N	67	±25%	400	0.25	50	10
BCMA2012-900N	90	±25%	400	0.30	50	10
BCMA2012-121N	120	±25%	400	0.30	50	10
BCMA2012-161N	160	±25%	350	0.35	50	10
BCMA2012-181N	180	±25%	350	0.35	50	10
BCMA2012-201N	200	±25%	300	0.40	50	10
BCMA2012-221N	220	±25%	300	0.40	50	10
BCMA2012-261N	260	±25%	300	0.40	50	10
BCMA2012-361N	360	±25%	300	0.50	50	10
BCMA2012-102N	1000	±25%	100	1.30	50	10

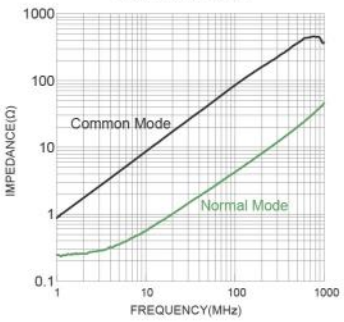
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=20°C

Typical Electrical Characteristics

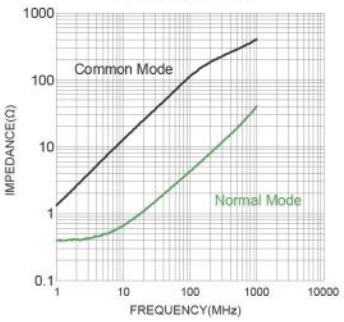
BCMA2012-670N



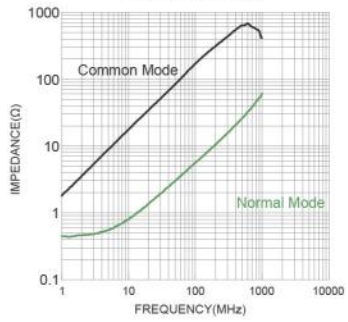
BCMA2012-900N



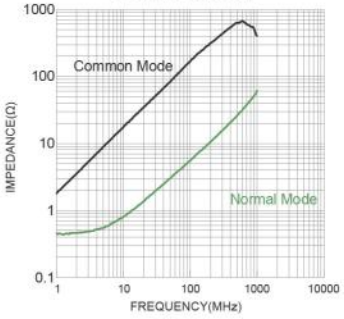
BCMA2012-121N



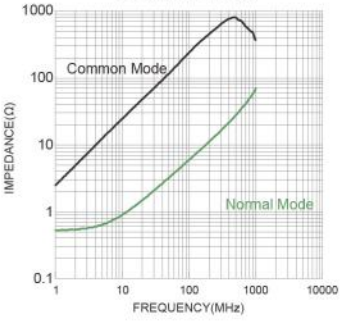
BCMA2012-161N



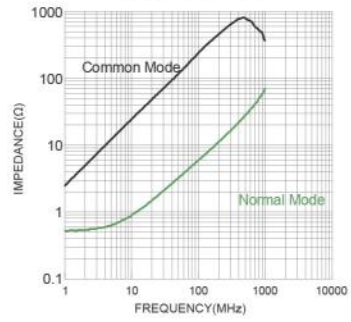
BCMA2012-181N



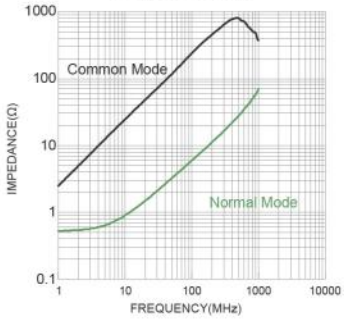
BCMA2012-201N



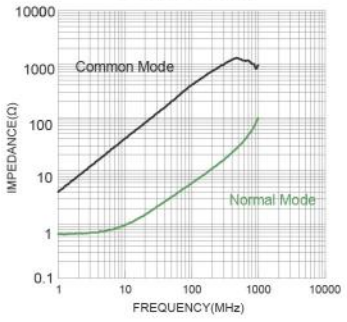
BCMA2012-221N



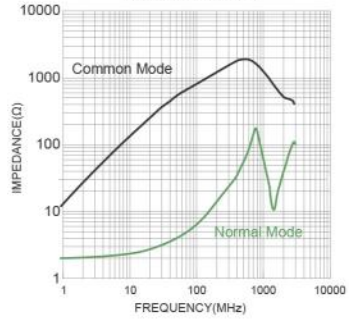
BCMA2012-261N



BCMA2012-361N



BCMA2012-102N

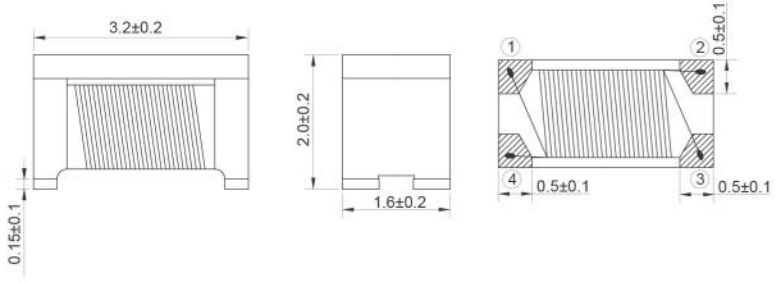


BCMA Series

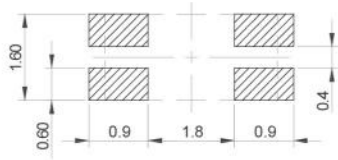
Common Mode Filters For Automotive Signal Line

3216 Size

Dimensions: [mm]



Land Pattern: [mm]



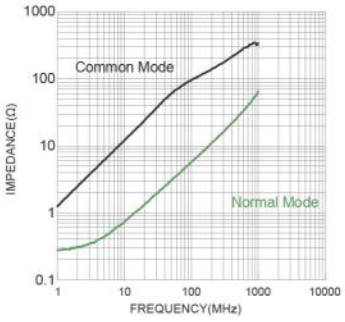
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Temperature Rise Current Max. (mA)	DC Resistance Max. (Ω)	Rated voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA3216-900N	90	400	0.30	50	10
BCMA3216-121N	120	350	0.30	50	10
BCMA3216-161N	160	350	0.40	50	10
BCMA3216-221N	220	300	0.45	50	10
BCMA3216-261N	260	300	0.50	50	10
BCMA3216-361N	360	300	0.60	50	10
BCMA3216-601N	600	300	0.80	50	10
BCMA3216-102N	1000	200	1.00	50	10
BCMA3216-222N	2200	200	1.20	50	10

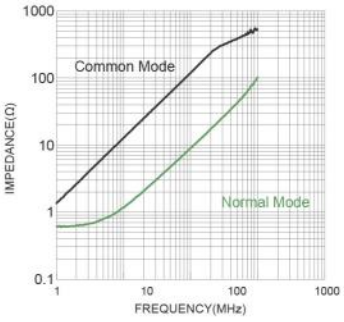
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=20°C

Typical Electrical Characteristics

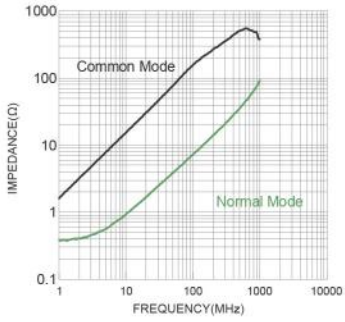
BCMA3216-900N



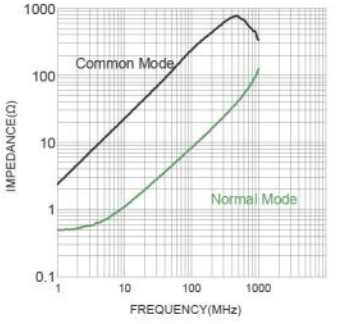
BCMA3216-121N



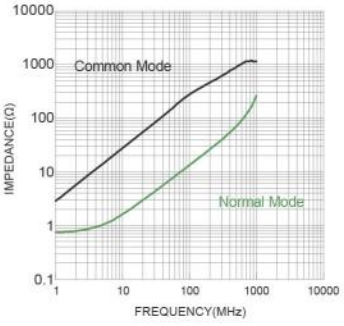
BCMA3216-161N



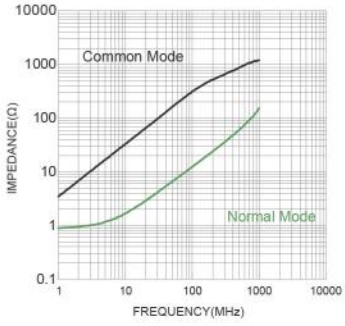
BCMA3216-221N



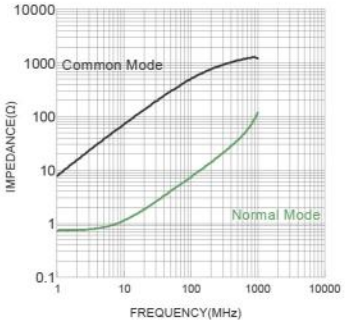
BCMA3216-261N



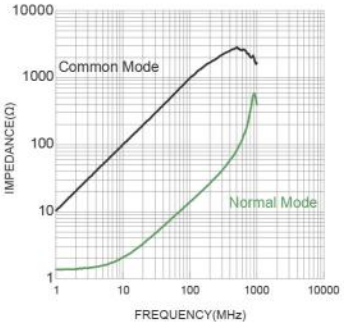
BCMA3216-361N



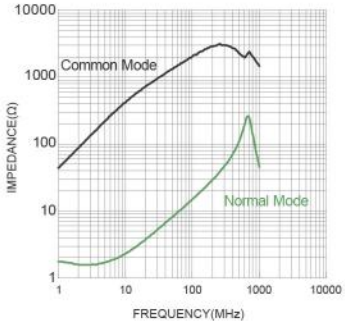
BCMA3216-601N



BCMA3216-102N



BCMA3216-222N

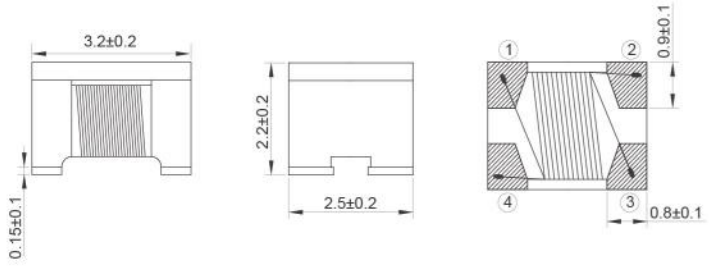


BCMA Series

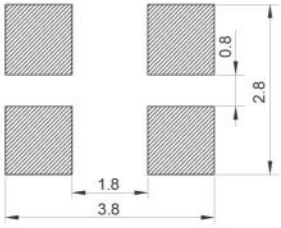
Common Mode Filters For Automotive Signal Line

3225 Size

Dimensions: [mm]



Land Pattern: [mm]



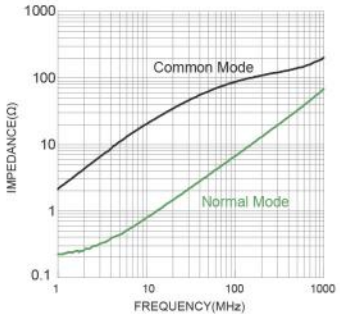
Electrical Properties

Part No	Impedance @ 100MHz (Ω)	Temperature Rise Current Max. (mA)	DC Resistance Max. (Ω)	Rated voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA3225-900N	90	1000	0.05	50	10
BCMA3225-601N	600	1000	0.20	50	10
BCMA3225-102N	1000	400	0.30	50	10

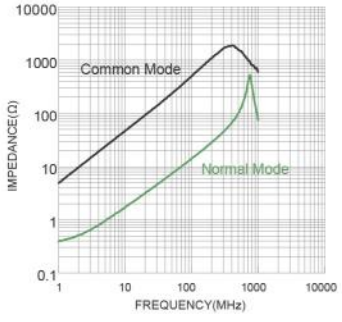
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=20°C

Typical Electrical Characteristics

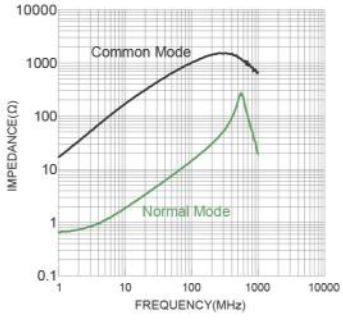
BCMA3225-900N



BCMA3225-601N



BCMA3225-102N

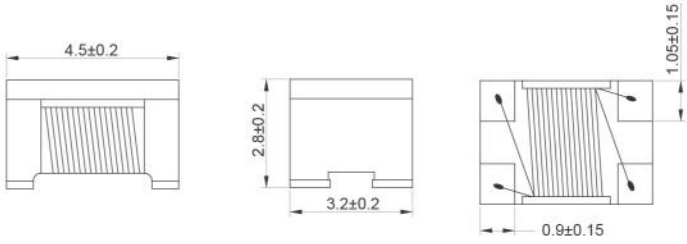


BCMA Series

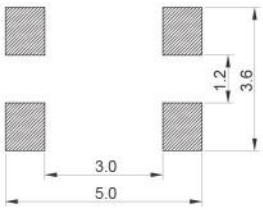
Common Mode Filters For Automotive Signal Line

4532 Size

Dimensions: [mm]



Land Pattern: [mm]



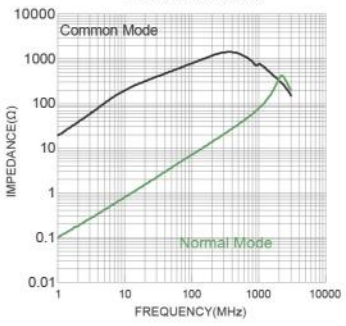
Electrical Properties

Part No	Impedance @ 100MHz Min. (Ω)	Impedance @ 100MHz Typ. (Ω)	Temperature Rise Current Max. (mA)	DC Resistance Max. (Ω)	Rated voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA4532-900N	68	90	4000	0.05	50	10
BCMA4532-231N	173	230	3500	0.05	50	10
BCMA4532-601N	450	600	2500	0.06	50	10

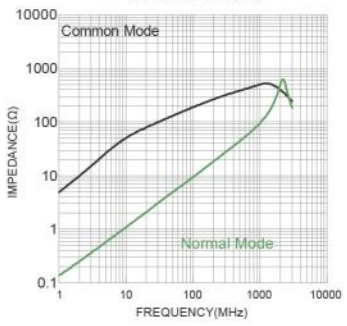
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=20°C

Typical Electrical Characteristics

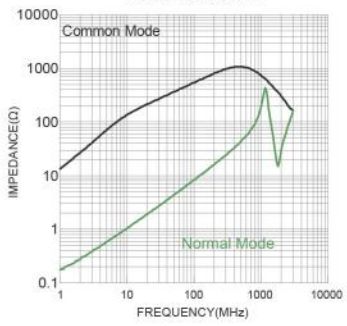
BCMA4532-900N



BCMA4532-231N



BCMA4532-601N

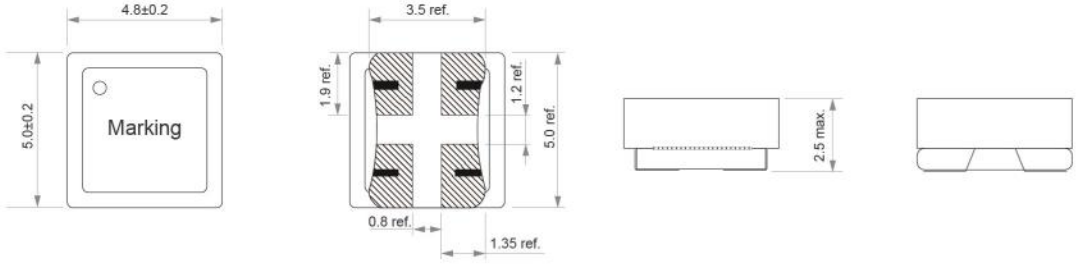


BCMA Series

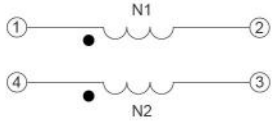
Common Mode Filters For Automotive Signal Line/Power Line

5020 Size

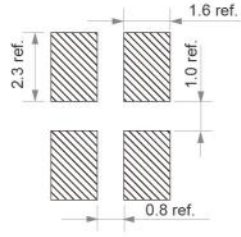
Dimensions: [mm]



Schematic



Land Pattern: [mm]



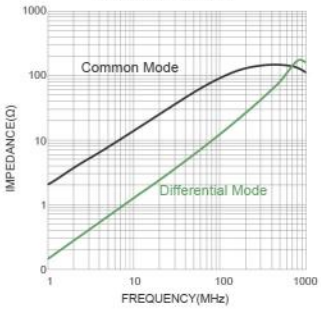
Electrical Properties

Part No	Impedance @100MHz Typ. (Ω)	Temperature Rise Current Max. (A)	DC Resistance Max. (mΩ)	Rated Voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA5020-101N	100	6.0	13	50	10
BCMA5020-251N	250	5.0	20	50	10
BCMA5020-501N	500	4.0	27	50	10
BCMA5020-102N	1000	2.0	34	50	10
BCMA5020-142N	1400	1.5	56	50	10
BCMA5020-152N	1500	1.5	56	50	10

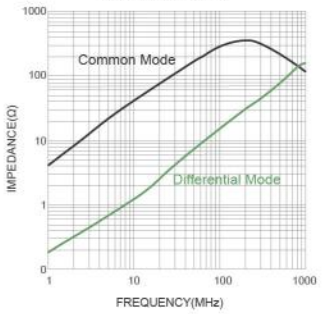
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

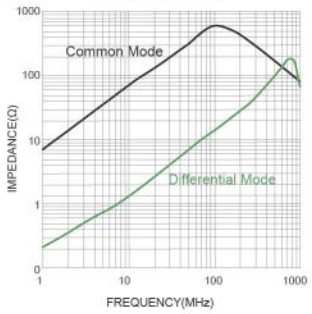
BCMA5020-101N



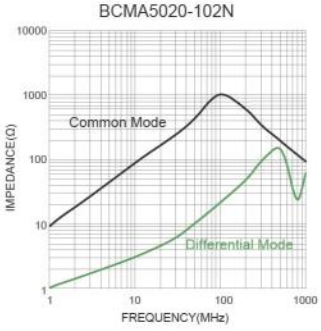
BCMA5020-251N



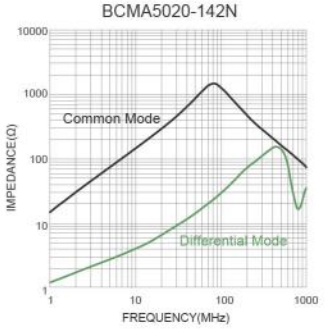
BCMA5020-501N



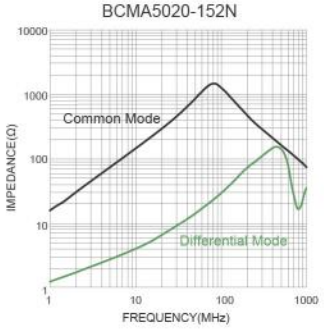
BCMA5020-102N



BCMA5020-142N



BCMA5020-152N

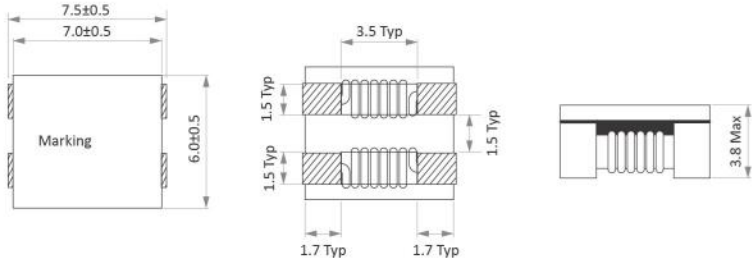


BCMA Series

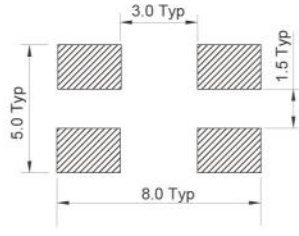
Common Mode Filters For Automotive Power Line

7060 Size

Dimensions: [mm]



Land Pattern: [mm]



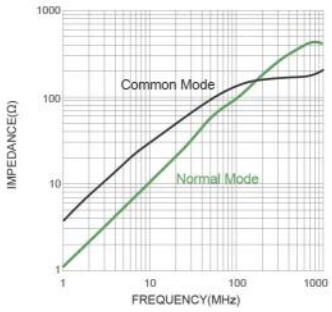
Electrical Properties

Part No	Impedance @ 100MHz Min. (Ω)	Impedance @ 100MHz Typ. (Ω)	Temperature Rise Current Max. (A)	DC Resistance Max. (mΩ)	Rated voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA7060-700Y	40	70	15	5	80	10
BCMA7060-141Y	100	140	9.0	10	80	10
BCMA7060-301Y	225	300	5.0	10	80	10
BCMA7060-501Y	400	500	5.0	10	80	10
BCMA7060-701Y	500	700	4.0	15	80	10
BCMA7060-102Y	800	1000	3.0	17	80	10
BCMA7060-132Y	910	1300	3.0	20	80	10
BCMA7060-272Y	2000	2700	1.0	63	80	10
BCMA7060-302Y	2500	3000	0.9	75	80	10

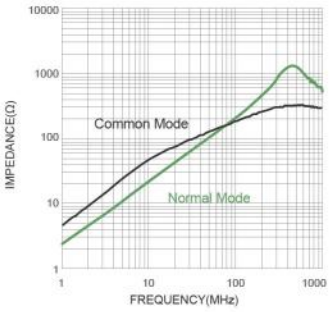
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

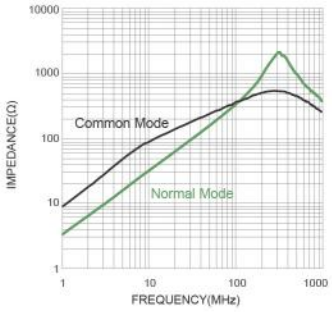
BCMA7060-700Y



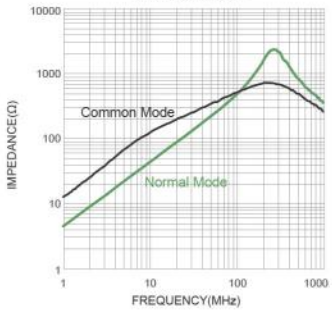
BCMA7060-141Y



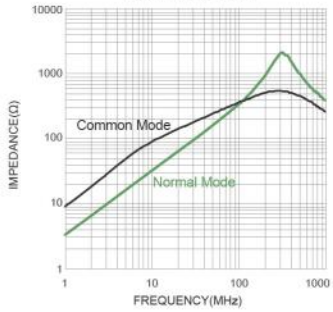
BCMA7060-301Y



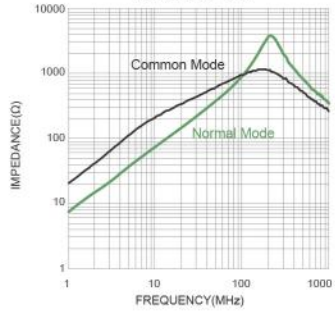
BCMA7060-501Y



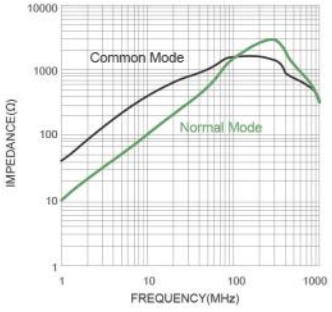
BCMA7060-701Y



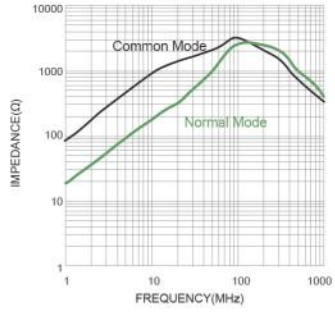
BCMA7060-102Y



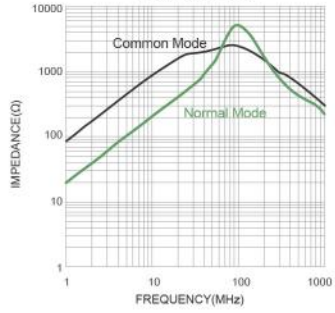
BCMA7060-132Y



BCMA7060-272Y



BCMA7060-302Y

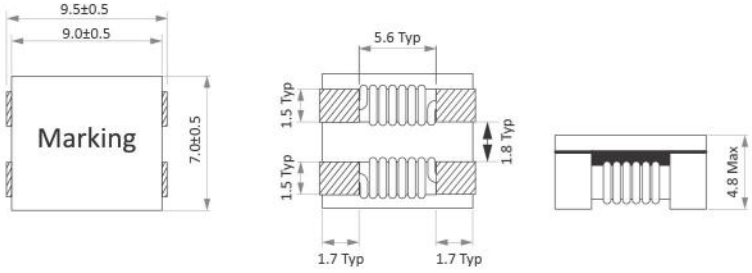


BCMA Series

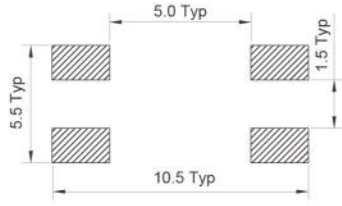
Common Mode Filters For Automotive Power Line

9070 Size

Dimensions: [mm]



Land Pattern: [mm]



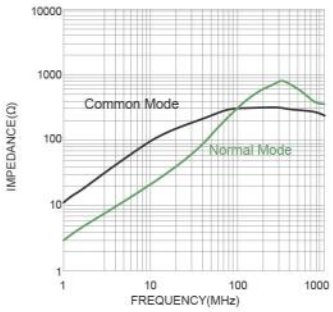
Electrical Properties

Part No	Impedance Min. (Ω)	Impedance Typ. (Ω)	Test Frequency @0.1V	Temperature Rise Current Max. (A)	DC Resistance Max. (mΩ)	Rated voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA9070-301Y	225	300	100MHz	6.0	6	80	10
BCMA9070-501Y	450	500	100MHz	5.5	8	80	10
BCMA9070-701Y	500	700	100MHz	5.0	10	80	10
BCMA9070-102Y	750	1000	100MHz	4.0	13	80	10
BCMA9070-152Y	1000	1500	100MHz	4.5	15	80	10
BCMA9070-222Y	1700	2200	20~50MHz	3.0	50	80	10
BCMA9070-272Y	2000	2700	20~50MHz	3.5	32	80	10
BCMA9070-302Y	2500	3000	20~50MHz	1.9	85	80	10
BCMA9070-402Y	3300	4000	20~50MHz	1.8	100	80	10

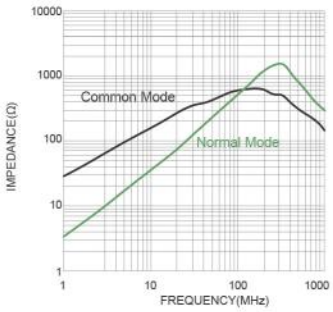
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

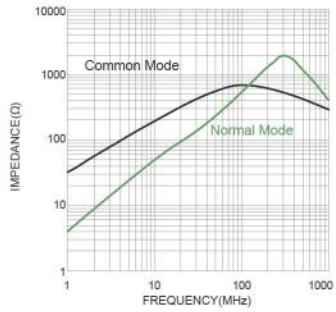
BCMA9070-301Y



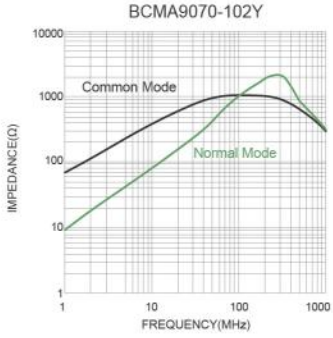
BCMA9070-501Y



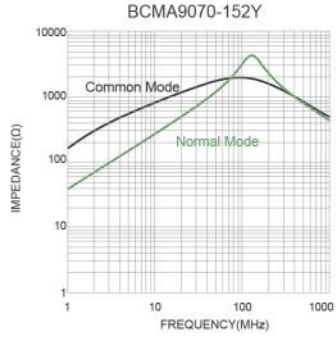
BCMA9070-701Y



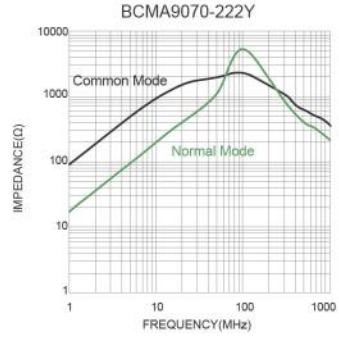
BCMA9070-102Y



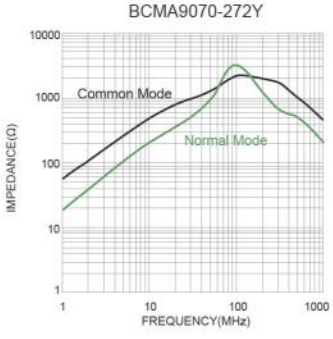
BCMA9070-152Y



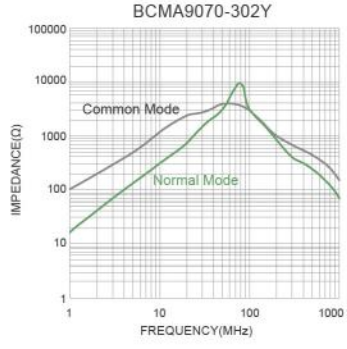
BCMA9070-222Y



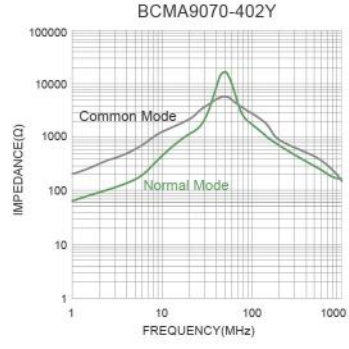
BCMA9070-272Y



BCMA9070-302Y



BCMA9070-402Y

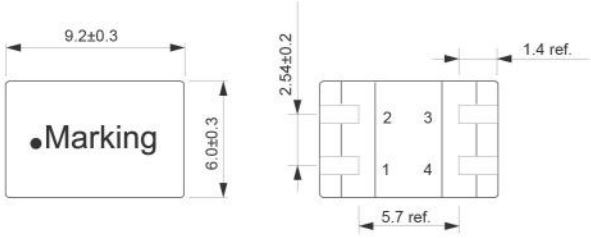


BCMA Series

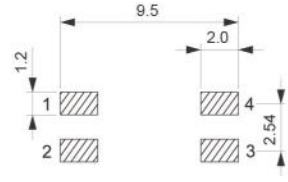
SMD Common Mode Line Filter

9250 Size

Dimensions: [mm]



Land Pattern: [mm]



Schematic

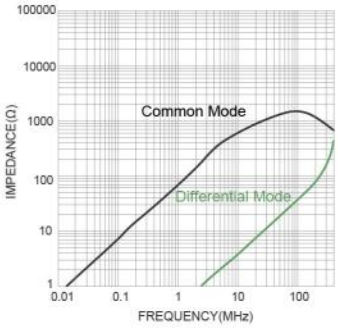
Electrical Properties

Part No	Inductance (μH)	Tolerance	Temperature Rise Current Max. (A)	DC Resistance Max. (Ω)	Rated Voltage (Volts)	Insulation Voltage (Vac)	Test Conditions
BCMA9250-100N	10	±30%	1.6	0.08	80	500	1KHz/0.1V
BCMA9250-S100N	10	±30%	1.6	0.08	80	500	1KHz/0.1V
BCMA9250-250N	25	±30%	1.0	0.12	80	500	1KHz/0.1V
BCMA9250-S250N	25	±30%	1.0	0.12	80	500	1KHz/0.1V
BCMA9250-400N	40	±30%	0.9	0.25	80	500	1KHz/0.1V
BCMA9250-S400N	40	±30%	0.9	0.25	80	500	1KHz/0.1V
BCMA9250-510N	51	±30%	1.0	0.16	80	500	1KHz/0.1V
BCMA9250-S510N	51	±30%	1.0	0.16	80	500	1KHz/0.1V
BCMA9250-251Y	250	±50%	1.2	0.13	80	500	100KHz/5mV
BCMA9250-501Y	500	±50%	1.0	0.15	80	500	100KHz/5mV
BCMA9250-102Y	1000	±50%	0.8	0.207	80	500	100KHz/5mV

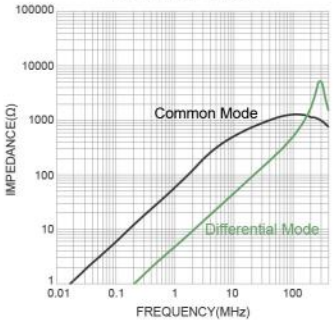
Part No	Inductance (μH)	Tolerance	Temperature Rise Current Max. (A)	DC Resistance Max. (Ω)	Rated Voltage (Volts)	Insulation Voltage (Vac)	Test Conditions
BCMA9250-202Y	2000	±50%	0.60	0.42	80	500	100KHz/5mV
BCMA9250-472Y	4700	±50%	0.50	0.75	80	500	100KHz/5mV
BCMA9250-652Y	6500	±50%	0.40	0.95	80	500	10KHz/50mV
BCMA9250-103Y	10000	±50%	0.35	1.20	80	500	10KHz/50mV
BCMA9250-203Y	20000	±50%	0.20	2.60	80	500	10KHz/50mV

Typical Electrical Characteristics

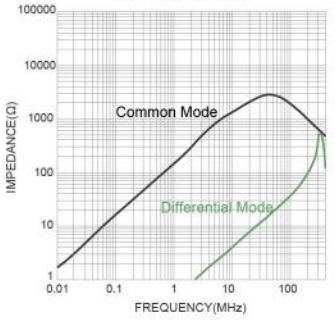
BCMA9250-100N



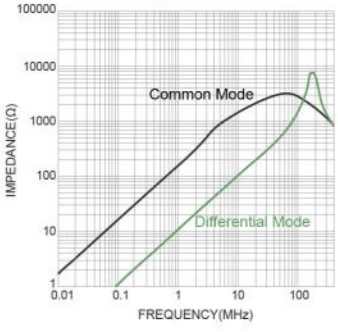
BCMA9250-S100N



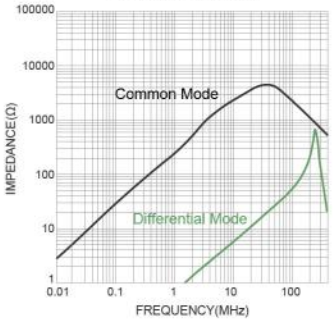
BCMA9250-250N



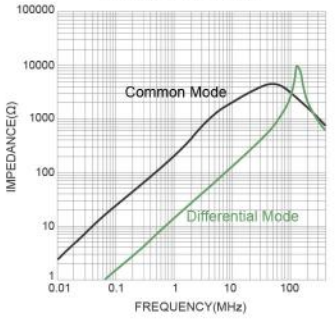
BCMA9250-S250N



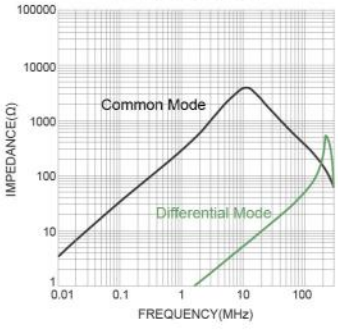
BCMA9250-400N



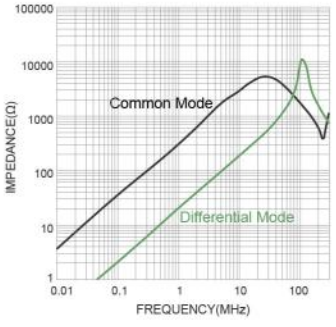
BCMA9250-S400N



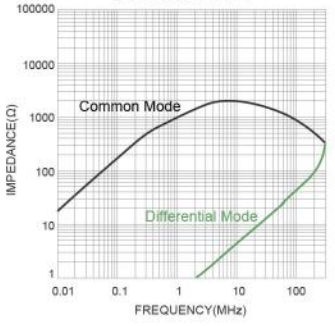
BCMA9250-510N



BCMA9250-S510N

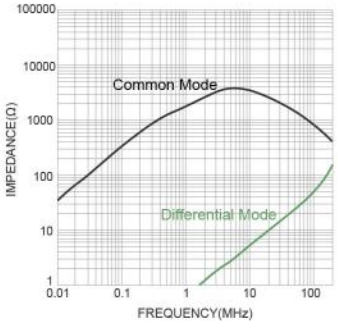


BCMA9250-251Y

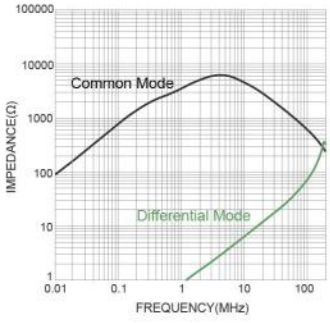


Typical Electrical Characteristics

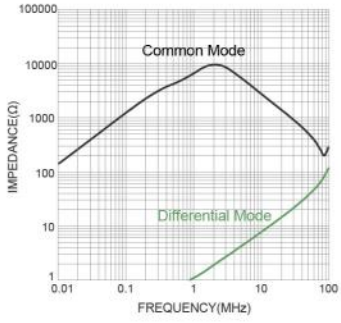
BCMA9250-501Y



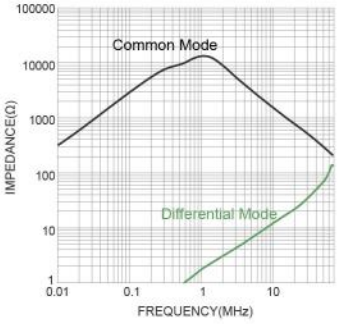
BCMA9250-102Y



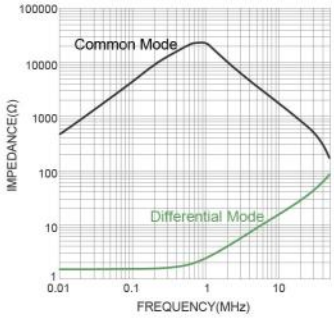
BCMA9250-202Y



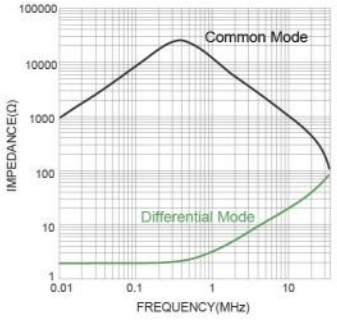
BCMA9250-472Y



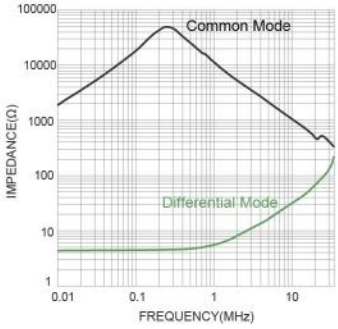
BCMA9250-652Y



BCMA9250-103Y



BCMA9250-203Y

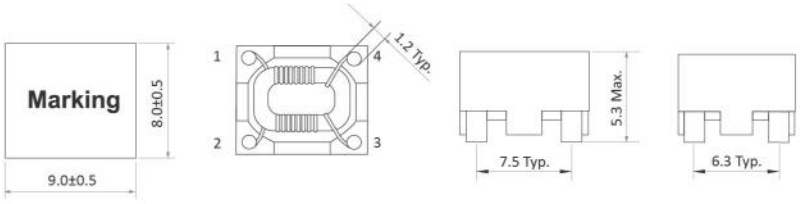


BCMA Series

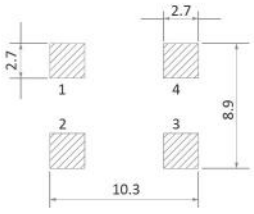
Common Mode Filters For Automotive Signal Line

1009 Size

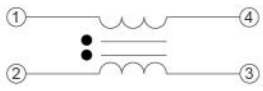
Dimensions: [mm]



Land Pattern: [mm]



Schematic

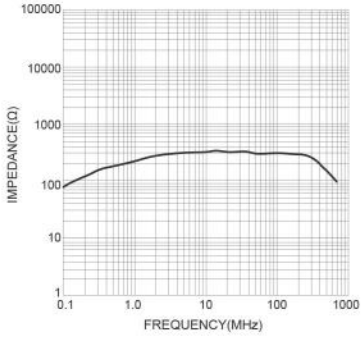


Electrical Properties

Part No	Inductance @100KHz/0.1V (μH)	Tolerance	Impedance Max. (Ω)	Temperature Rise Current Max. (A)	DC Resistance Max. (mΩ)	Frequency (MHz)
BCMA1009-050Y	5	±50%	500	5.00	10	108
BCMA1009-090Y	9	±50%	800	3.50	11	105
BCMA1009-110Y	11	±50%	1000	2.50	30	100
BCMA1009-300Y	30	±50%	2200	1.40	60	60
BCMA1009-500Y	50	±50%	3200	0.50	96	22
BCMA1009-121Y	120	±40%	460	2.50	30	40
BCMA1009-151Y	150	±40%	480	3.50	13	10
BCMA1009-221Y	220	±40%	780	2.20	32	18
BCMA1009-251Y	250	±40%	970	2.00	40	15
BCMA1009-471Y	470	±40%	1750	1.60	70	12
BCMA1009-102Y	1000	±40%	3600	0.95	180	6.0
BCMA1009-222Y	2200	±40%	7500	0.75	300	4.0
BCMA1009-332Y	3300	±40%	8900	0.65	360	2.0
BCMA1009-392Y	3900	±40%	9600	0.52	540	2.0
BCMA1009-472Y	4700	±40%	13000	0.35	720	1.2

Typical Electrical Characteristics

BCMA1009-121Y

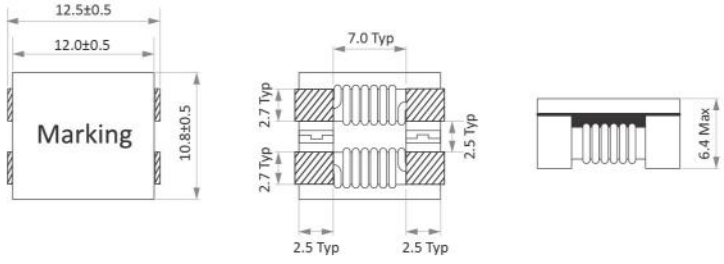


BCMA Series

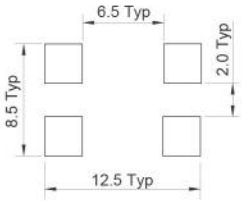
Common Mode Filters For Automotive Power Line

1211 Size

Dimensions: [mm]



Land Pattern: [mm]

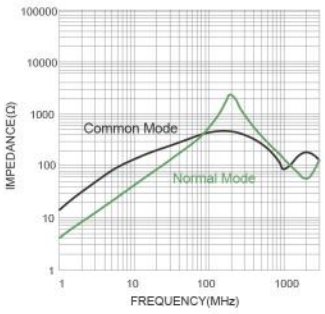


Electrical Properties

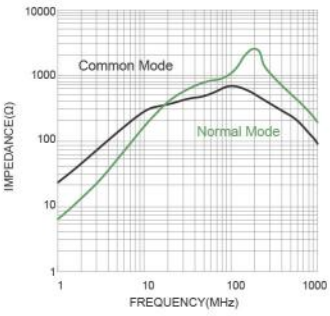
Part No	Impedance @100MHz Max. (Ω)	Impedance @100MHz Typ. (Ω)	Temperature Rise Current Max. (A)	DC Resistance Max. (mΩ)	Rated Voltage Max. (Volts)	Insulation Resistance Min. (MΩ)
BCMA1211-301Y	200	300	9.0	4.0	80	10
BCMA1211-501Y	300	500	8.0	5.5	80	10
BCMA1211-701Y	500	700	8.0	6.0	80	10
BCMA1211-102Y	750	1000	6.0	14	80	10
BCMA1211-172Y	1200	1700	4.8	12	80	10
BCMA1211-252Y	2200	2500	1.8	35	80	10
BCMA1211-272Y	2300	2700	1.5	50	80	10

Typical Electrical Characteristics

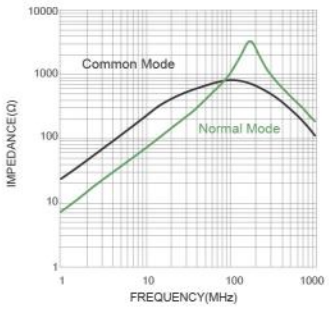
BCMA1211-301Y



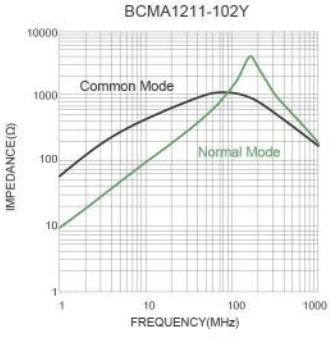
BCMA1211-501Y



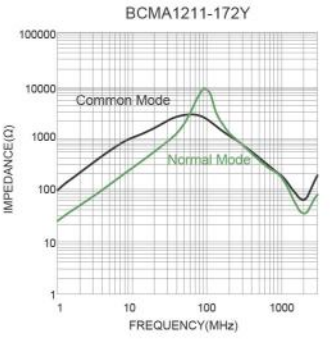
BCMA1211-701Y



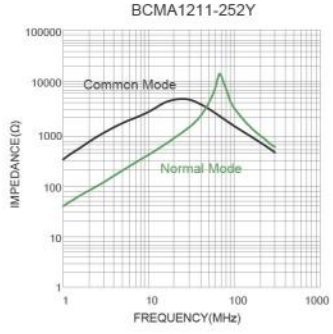
BCMA1211-102Y



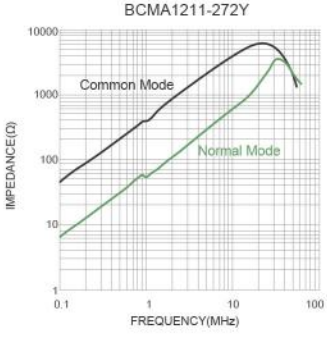
BCMA1211-172Y



BCMA1211-252Y



BCMA1211-272Y



NRSA Series

SMD Power Inductors For Automotive

FEATURES

- Magnetic shield type wound inductor for power circuits using a ferrite magnetic material
- High magnetic shield construction and compatible with high-density mounting
- Larger current and lower Rdc were achieved by optimizing the ferrite core figure
- Operating temperature: –55 to +125°C
- AEC-Q200 qualified

APPLICATION

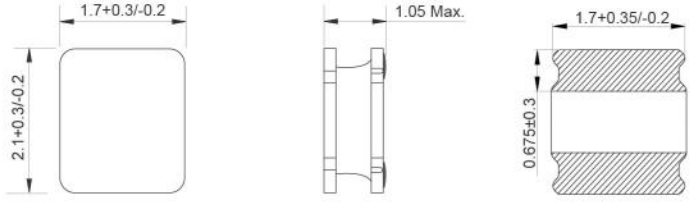
- Car navigation,car stereo and car accessories only

NRSA Series

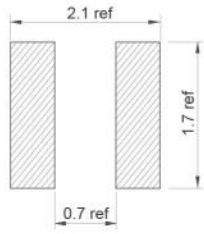
SMD Power Inductors For Automotive

201610 Size

Dimensions: [mm]



Land Pattern: [mm]



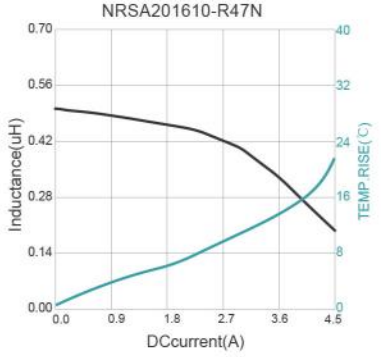
Electrical Properties

Part No	Inductance @ 1MHz/0.1V (μH)	Tolerance	Temperature Rise Current Max. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
NRSA201610-R47N	0.47	±30%	2.16	2.70	41	53
NRSA201610-R68N	0.68	±30%	1.60	2.00	66	82
NRSA201610-1R0M	1.00	±20%	1.60	2.00	90	115
NRSA201610-1R5M	1.50	±20%	1.36	1.70	137	156
NRSA201610-2R2M	2.20	±20%	1.01	1.26	155	174
NRSA201610-3R3M	3.30	±20%	0.84	1.05	240	294
NRSA201610-4R7M	4.70	±20%	0.68	0.85	340	432
NRSA201610-6R8M	6.80	±20%	0.58	0.72	575	620
NRSA201610-100M	10.0	±20%	0.48	0.60	730	864
NRSA201610-150M	15.0	±20%	0.39	0.55	1300	1680
NRSA201610-180M	18.0	±20%	0.32	0.40	1360	1700
NRSA201610-220M	22.0	±20%	0.30	0.38	1550	2000

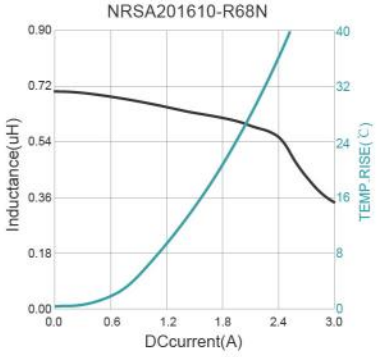
Saturation Current will cause L to drop approximately 35%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

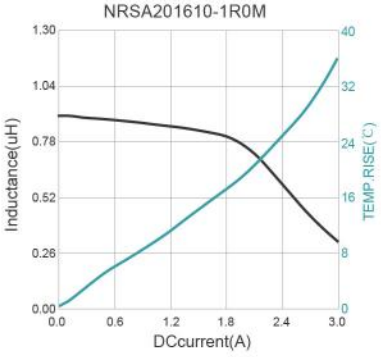
NRSA201610-R47N



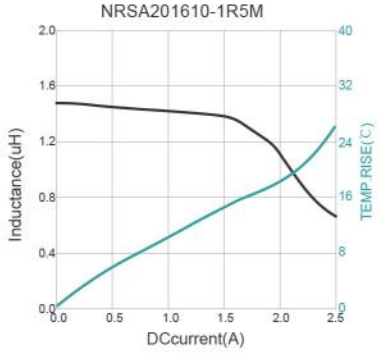
NRSA201610-R68N



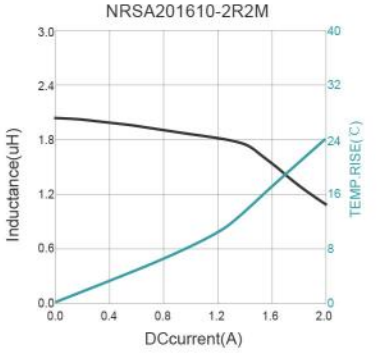
NRSA201610-1R0M



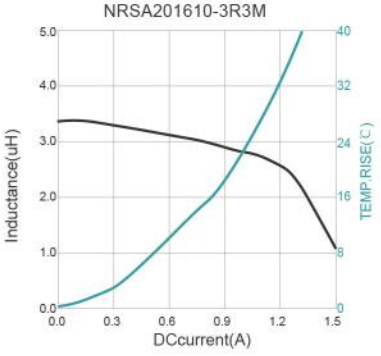
NRSA201610-1R5M



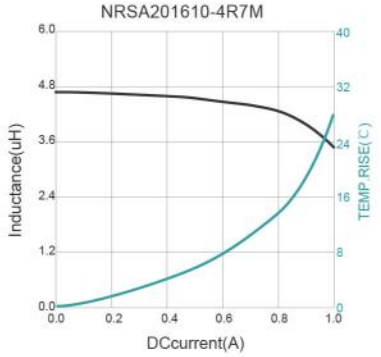
NRSA201610-2R2M



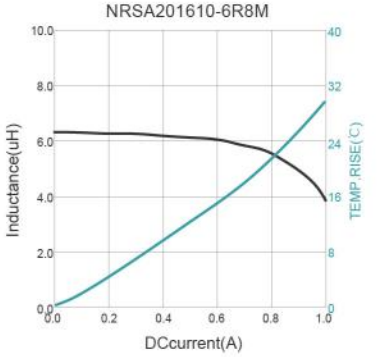
NRSA201610-3R3M



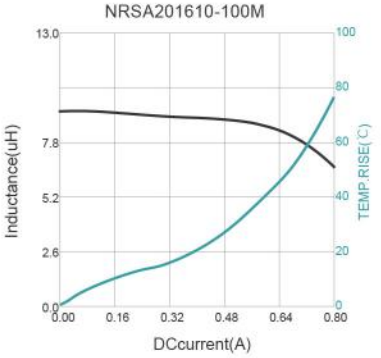
NRSA201610-4R7M



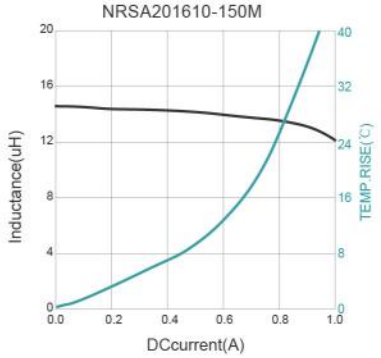
NRSA201610-6R8M



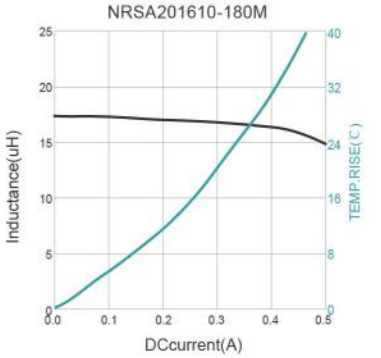
NRSA201610-100M



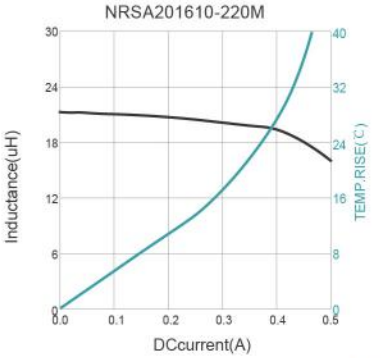
NRSA201610-150M



NRSA201610-180M



NRSA201610-220M

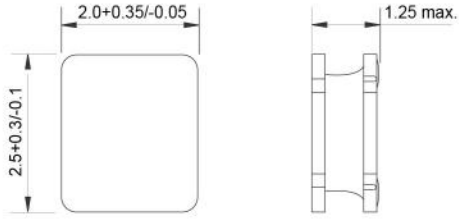


NRSA Series

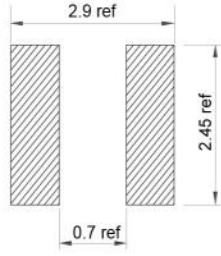
SMD Power Inductors For Automotive

2520B Size

Dimensions: [mm]



Land Pattern: [mm]



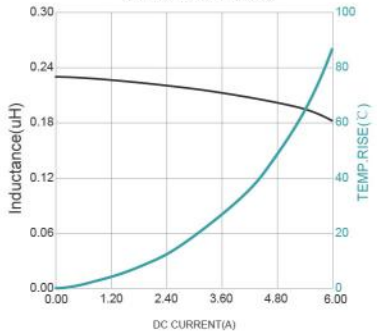
Electrical Properties

Part No	Inductance @ 1MHz/0.1V (μH)	Tolerance	Temperature Rise Current Max. (A)	Saturation Current Max. (A)	DC Resistance Max. (mΩ)
NRSA2520B-R24N	0.24	±30%	3.50	4.05	28
NRSA2520B-R33N	0.33	±30%	3.00	4.00	40
NRSA2520B-R47N	0.47	±30%	2.90	3.60	40
NRSA2520B-R56N	0.56	±30%	2.80	3.30	40
NRSA2520B-R68N	0.68	±30%	2.60	3.28	45
NRSA2520B-1R0M	1.00	±20%	2.40	2.45	60
NRSA2520B-1R5M	1.50	±20%	1.90	2.05	84
NRSA2520B-2R2M	2.20	±20%	1.80	1.90	110
NRSA2520B-3R3M	3.30	±20%	1.40	1.50	155
NRSA2520B-4R7M	4.70	±20%	1.20	1.35	228
NRSA2520B-6R8M	6.80	±20%	0.90	1.00	325
NRSA2520B-100M	10.0	±20%	0.75	0.79	480
NRSA2520B-150M	15.0	±20%	0.55	0.65	625
NRSA2520B-180M	18.0	±20%	0.50	0.55	1000
NRSA2520B-220M	22.0	±20%	0.45	0.50	1020
NRSA2520B-330M	33.0	±20%	0.37	0.38	1400
NRSA2520B-470M	47.0	±20%	0.29	0.30	2000

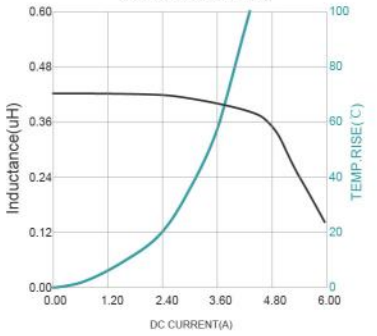
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

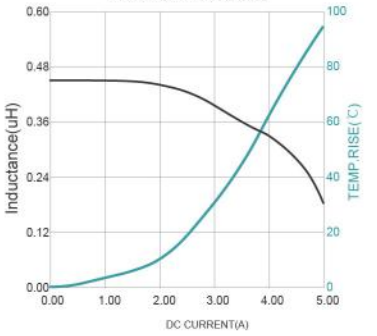
NRSA2520B-R24N



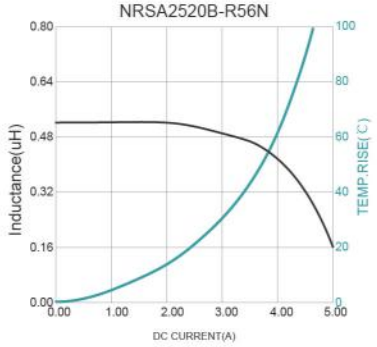
NRSA2520B-R33N



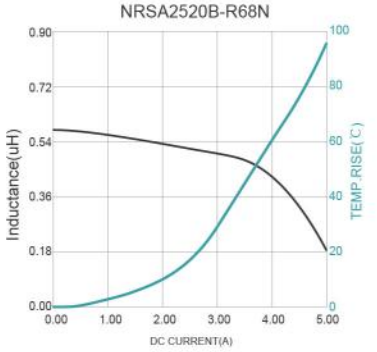
NRSA2520B-R47N



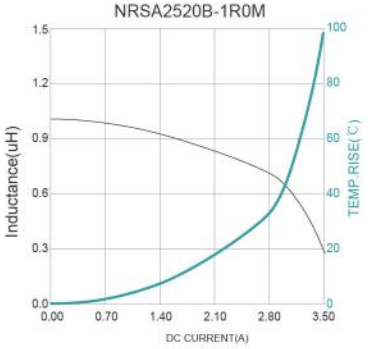
NRSA2520B-R56N



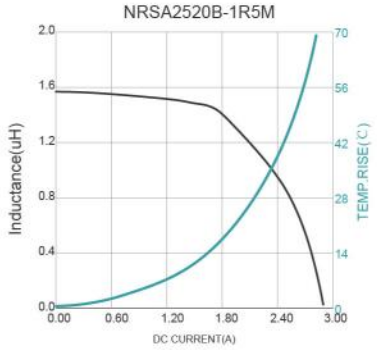
NRSA2520B-R68N



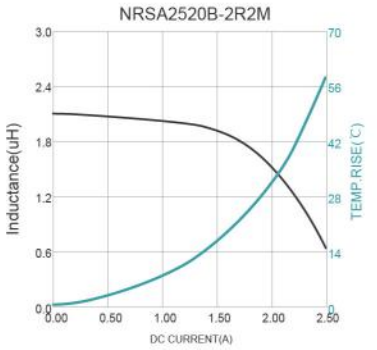
NRSA2520B-1R0M



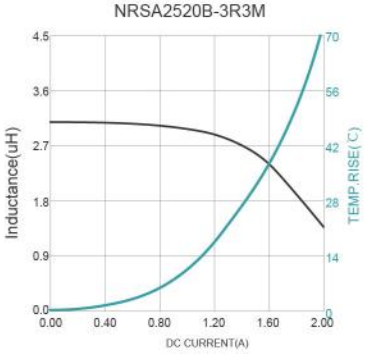
NRSA2520B-1R5M



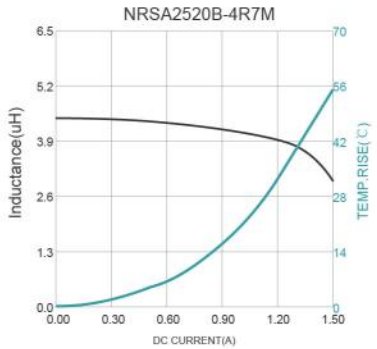
NRSA2520B-2R2M



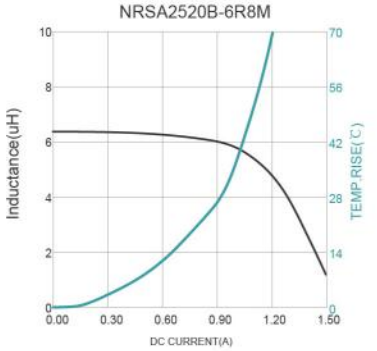
NRSA2520B-3R3M



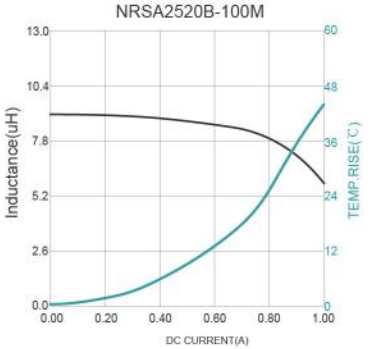
NRSA2520B-4R7M



NRSA2520B-6R8M

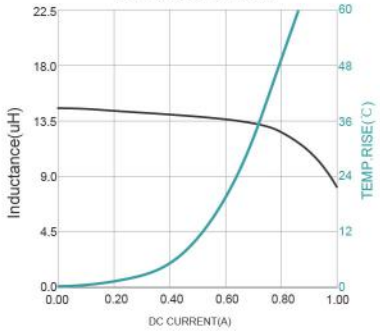


NRSA2520B-100M

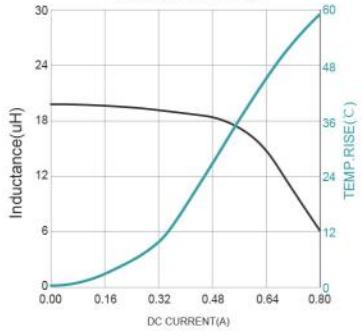


Typical Electrical Characteristics

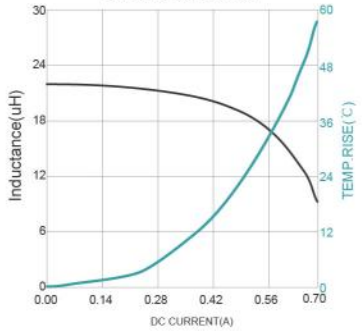
NRSA2520B-150M



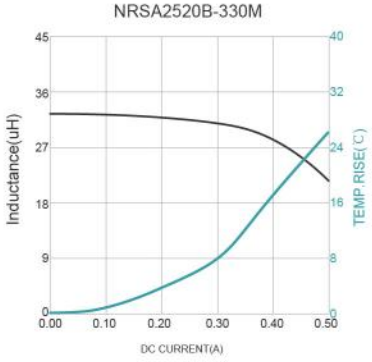
NRSA2520B-180M



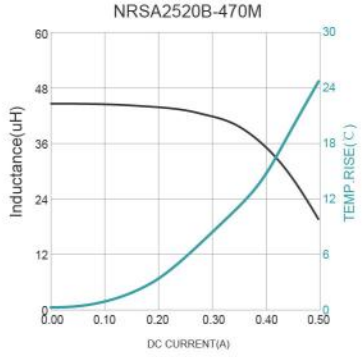
NRSA2520B-220M



NRSA2520B-330M



NRSA2520B-470M

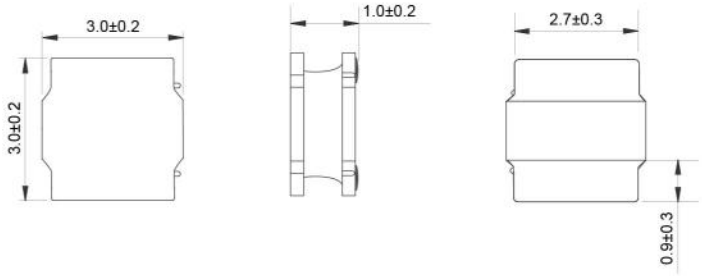


NRSA Series

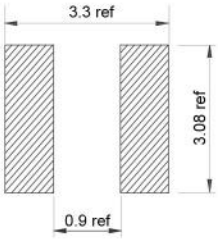
SMD Power Inductors For Automotive

3012B Size

Dimensions: [mm]



Land Pattern: [mm]



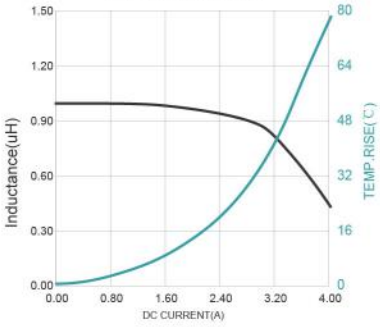
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance ±20% (mΩ)
NRSA3012B-1R0M	1.00	±20%	2.80	2.60	3.60	3.30	43
NRSA3012B-1R2M	1.20	±20%	2.60	2.40	3.30	3.00	60
NRSA3012B-1R5M	1.50	±20%	2.60	2.30	2.60	2.30	60
NRSA3012B-2R2M	2.20	±20%	2.20	1.80	2.40	2.10	100
NRSA3012B-2R7M	2.70	±20%	1.80	1.60	2.10	1.90	112
NRSA3012B-3R3M	3.30	±20%	1.70	1.50	1.60	1.45	115

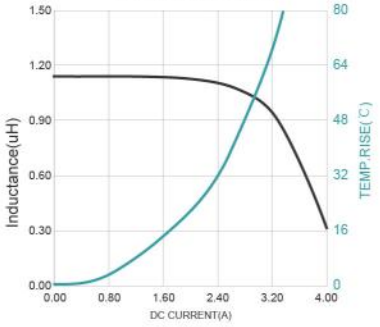
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

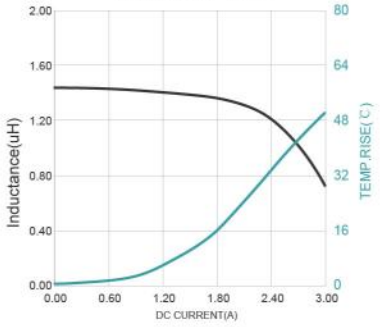
NRSA3012B-1R0M



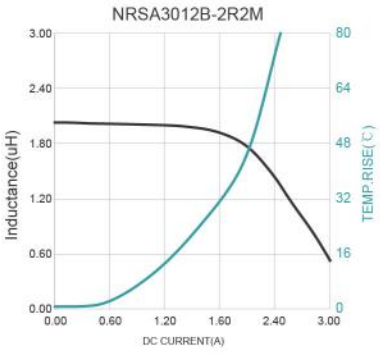
NRSA3012B-1R2M



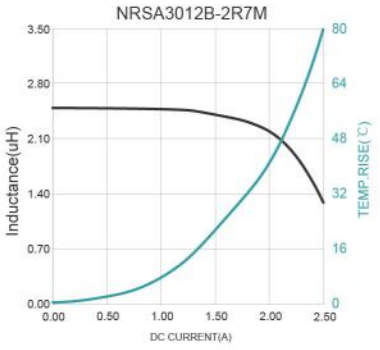
NRSA3012B-1R5M



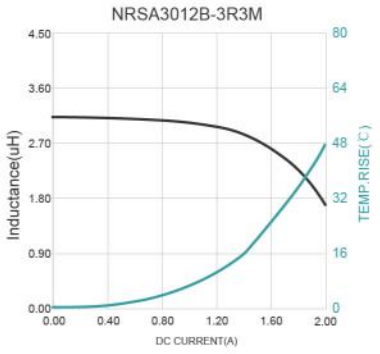
NRSA3012B-2R2M



NRSA3012B-2R7M



NRSA3012B-3R3M

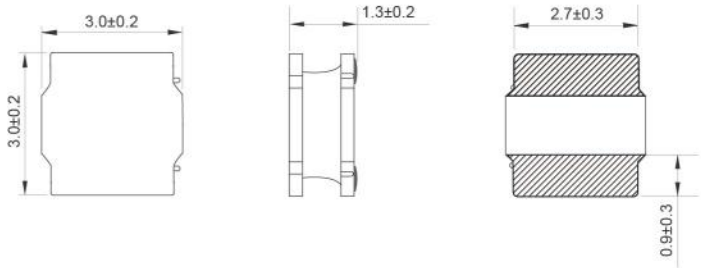


NRSA Series

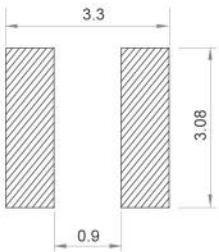
SMD Power Inductors For Automotive

3015B Size

Dimensions: [mm]



Land Pattern: [mm]



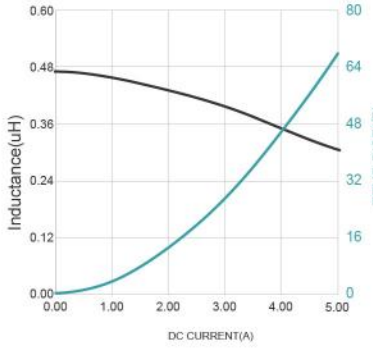
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance ±20% (mΩ)
NRSA3015B-R47N	0.47	±30%	3.70	3.30	4.30	4.00	22
NRSA3015B-R68N	0.68	±30%	3.50	3.20	3.80	3.20	26
NRSA3015B-1R0M	1.00	±20%	3.00	2.70	3.00	2.40	33
NRSA3015B-1R5M	1.50	±20%	2.70	2.50	2.40	2.00	38
NRSA3015B-2R2M	2.20	±20%	2.50	2.30	2.10	1.90	60
NRSA3015B-3R3M	3.30	±20%	2.20	2.00	1.70	1.50	85
NRSA3015B-4R7M	4.70	±20%	1.90	1.70	1.50	1.30	112
NRSA3015B-5R6M	5.60	±20%	1.80	1.60	1.40	1.20	135
NRSA3015B-6R8M	6.80	±20%	1.70	1.50	1.30	1.10	172

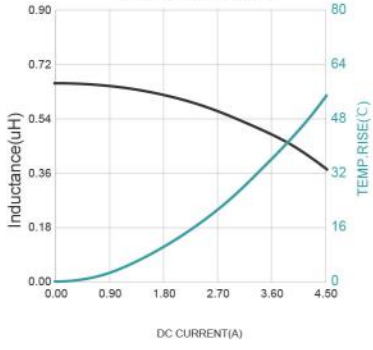
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

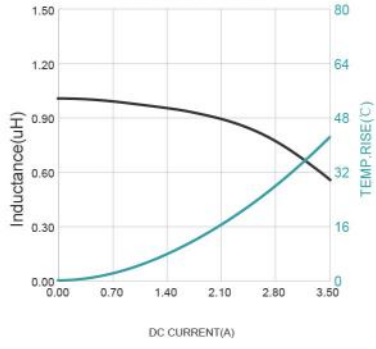
NRSA3015B-R47N



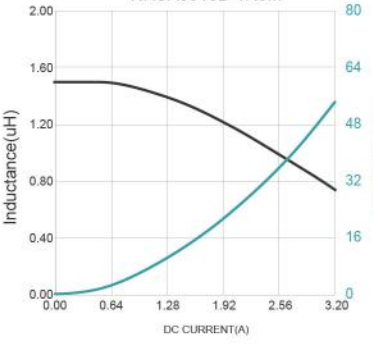
NRSA3015B-R68N



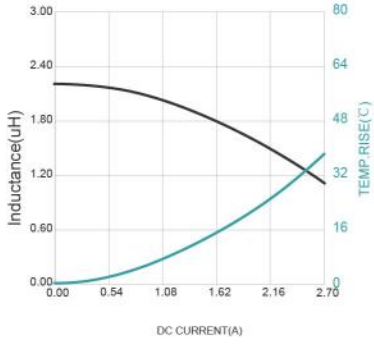
NRSA3015B-1R0M



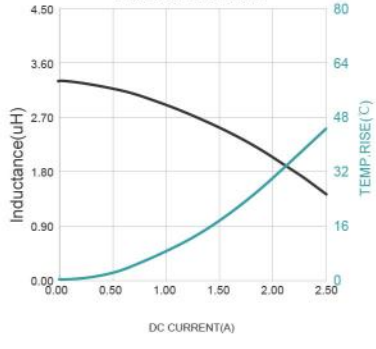
NRSA3015B-1R5M



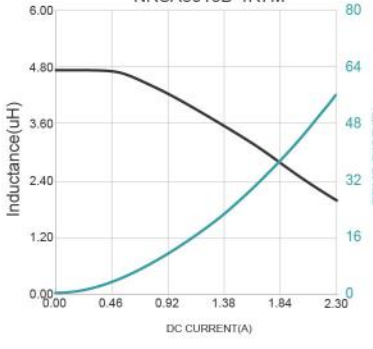
NRSA3015B-2R2M



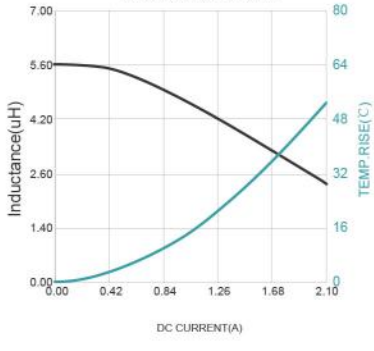
NRSA3015B-3R3M



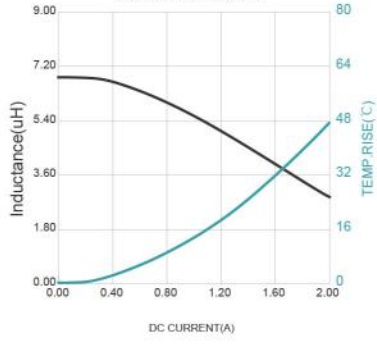
NRSA3015B-4R7M



NRSA3015B-5R6M



NRSA3015B-6R8M

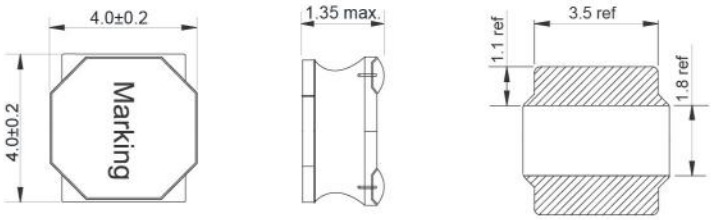


NRSA Series

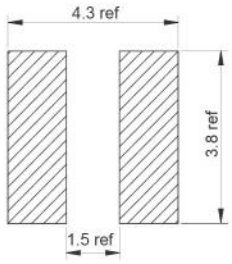
SMD Power Inductors For Automotive

4014B Size

Dimensions: [mm]



Land Pattern: [mm]



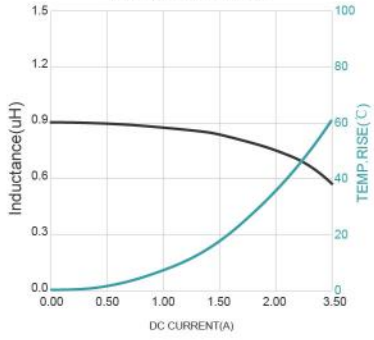
Electrical Properties

Part No	Inductance @100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance ±20% (mΩ)
NRSA4014B-1R0N	1.0	±30%	2.20	2.80	45
NRSA4014B-2R2M	2.2	±20%	1.90	1.65	75
NRSA4014B-3R3M	3.3	±20%	1.70	1.40	108
NRSA4014B-4R7M	4.7	±20%	1.50	1.20	108

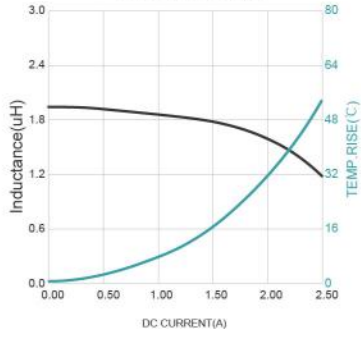
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

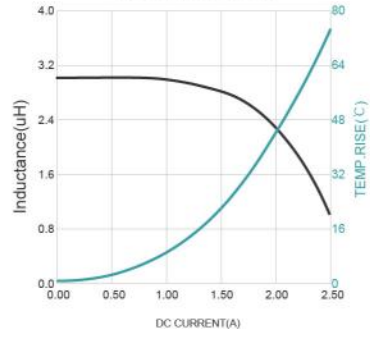
NRSA4014B-1R0N



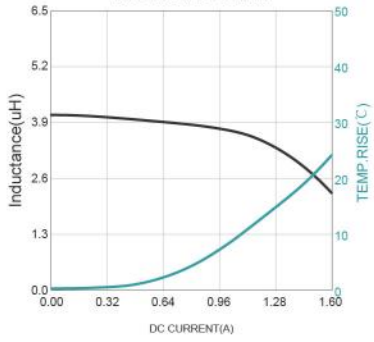
NRSA4014B-2R2M



NRSA4014B-3R3M



NRSA4014B-4R7M

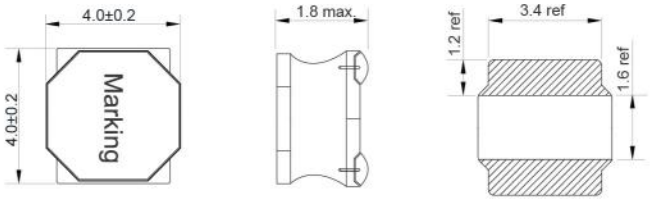


NRSA Series

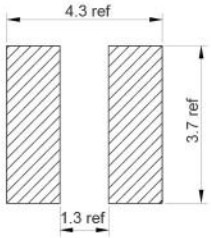
SMD Power Inductors For Automotive

4018B Size

Dimensions: [mm]



Land Pattern: [mm]



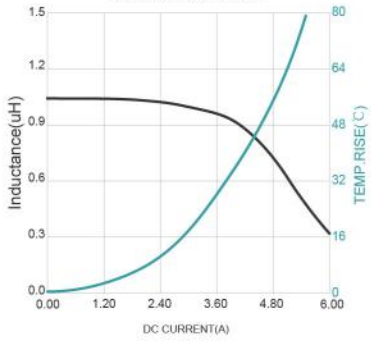
Electrical Properties

Part No	Inductance @100KHz/0.25V (μH)	Tolerance	Temperature Rise Current Max. (A)	Saturation Current Max. (A)	DC Resistance Max. (mΩ)
NRSA4018B-1R0M	1.0	±20%	3.50	4.50	32
NRSA4018B-2R2M	2.2	±20%	2.60	2.80	58
NRSA4018B-3R3M	3.3	±20%	2.00	2.15	84
NRSA4018B-4R7M	4.7	±20%	1.80	2.00	115
NRSA4018B-5R6M	5.6	±20%	1.65	1.70	125
NRSA4018B-6R8M	6.8	±20%	1.50	1.60	135
NRSA4018B-100M	10	±20%	1.30	1.40	220
NRSA4018B-150M	15	±20%	0.90	0.95	325
NRSA4018B-220M	22	±20%	0.75	0.80	450

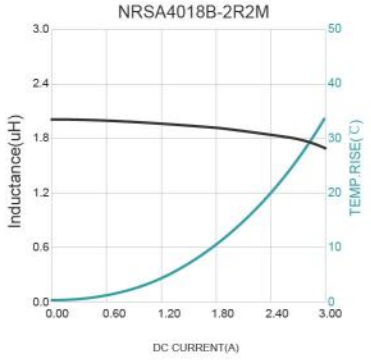
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

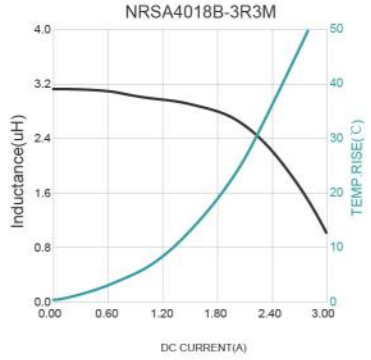
NRSA4018B-1R0M



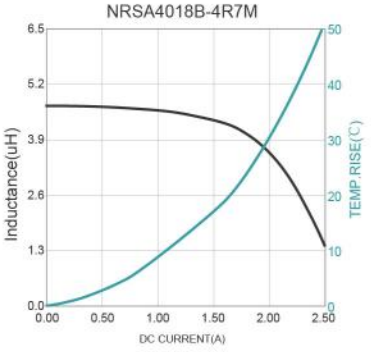
NRSA4018B-2R2M



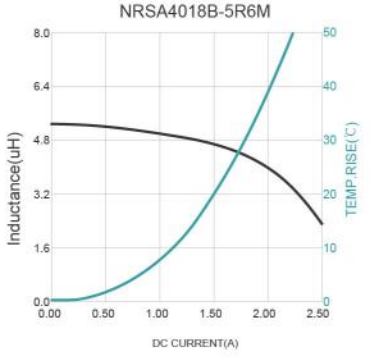
NRSA4018B-3R3M



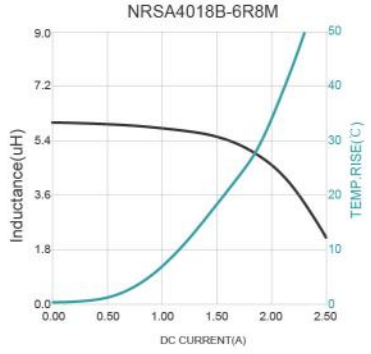
NRSA4018B-4R7M



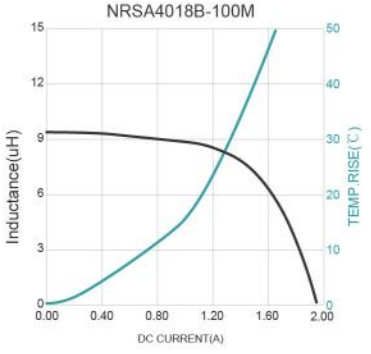
NRSA4018B-5R6M



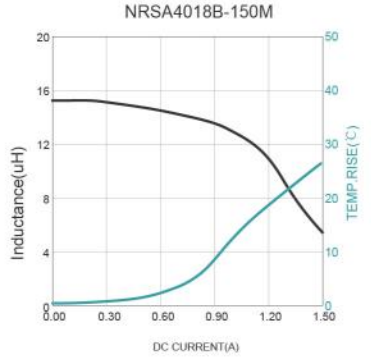
NRSA4018B-6R8M



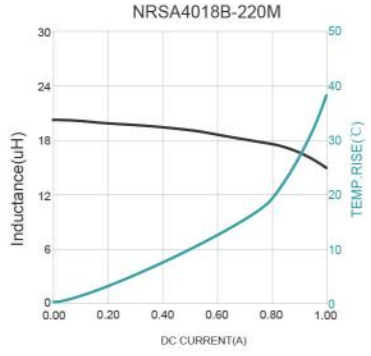
NRSA4018B-100M



NRSA4018B-150M



NRSA4018B-220M

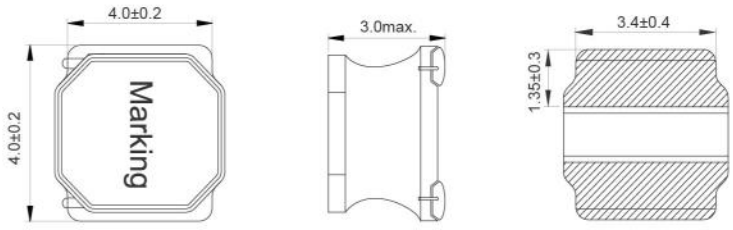


NRSA Series

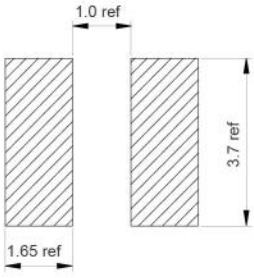
SMD Power Inductors For Automotive

4030 Size

Dimensions: [mm]



Land Pattern: [mm]

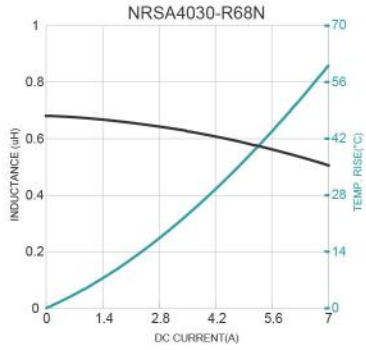


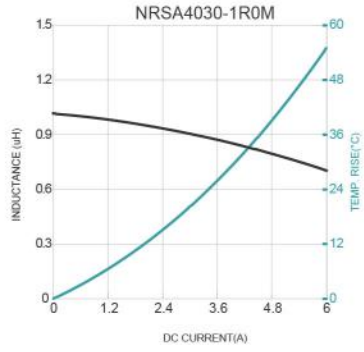
Electrical Properties

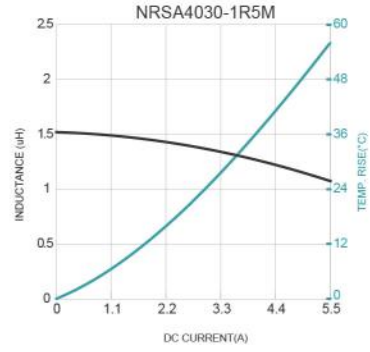
Part No	L@100KHz/1V (μH)	Tolerance	I_{SAT} Typ. (A)	I_R Typ. (A)	R_{DC} ±20% (mΩ)
NRSA4030-R68N	0.68	±30%	6.80	4.60	10
NRSA4030-1R0M	1.0	±20%	5.30	4.20	14
NRSA4030-1R5M	1.5	±20%	4.90	3.40	20
NRSA4030-2R2M	2.2	±20%	4.90	3.00	30
NRSA4030-3R3M	3.3	±20%	3.30	2.40	40
NRSA4030-4R7M	4.7	±20%	2.90	2.05	60
NRSA4030-5R6M	5.6	±20%	2.60	1.95	65
NRSA4030-6R8M	6.8	±20%	2.75	1.80	90
NRSA4030-8R2M	8.2	±20%	2.10	1.60	90
NRSA4030-100M	10	±20%	2.00	1.50	100
NRSA4030-120M	12	±20%	1.80	1.30	135
NRSA4030-150M	15	±20%	1.70	1.20	190
NRSA4030-180M	18	±20%	1.50	1.10	200
NRSA4030-220M	22	±20%	1.30	1.00	225
NRSA4030-330M	33	±20%	1.10	0.85	330
NRSA4030-470M	47	±20%	0.95	0.72	530

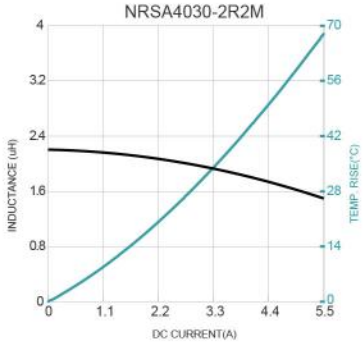
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Sacuration Current will cause Inductance to drop approximately 30% .

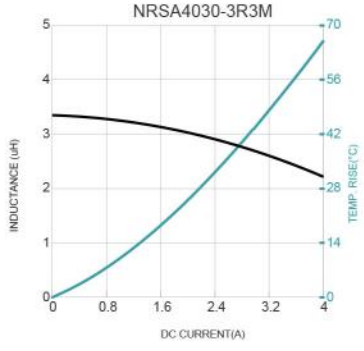
Typical Electrical Characteristics

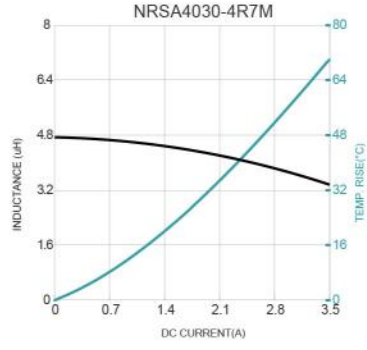


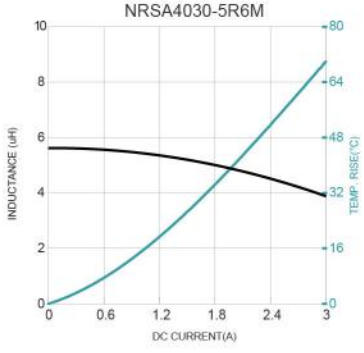


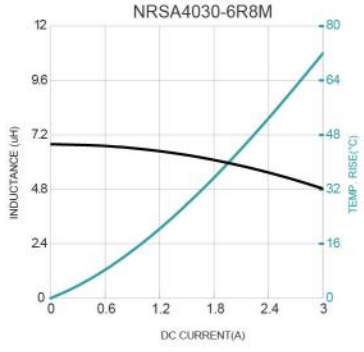


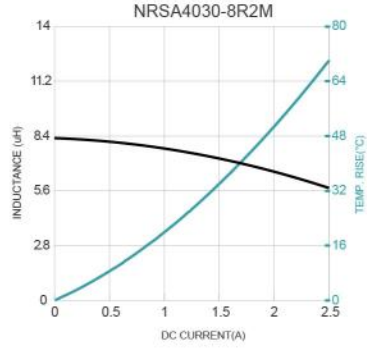


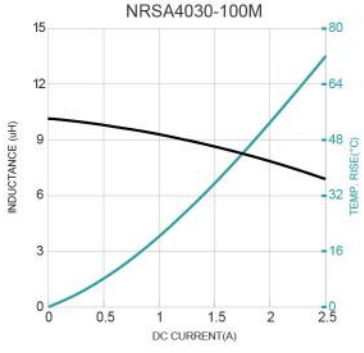


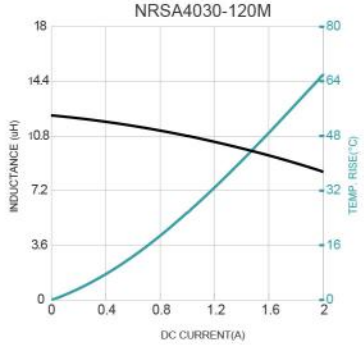


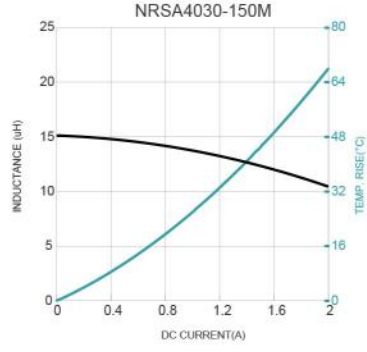




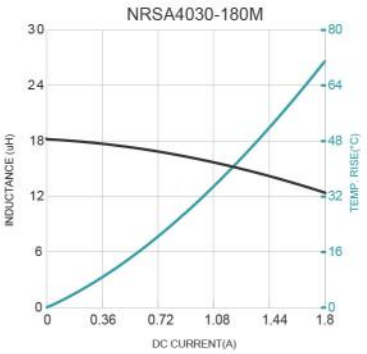


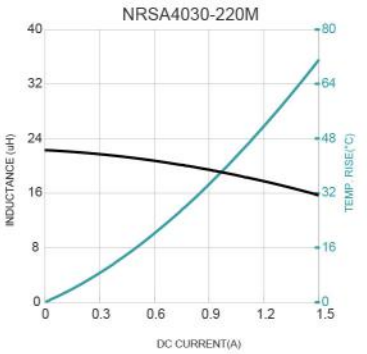


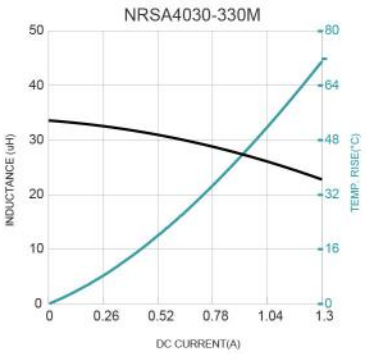


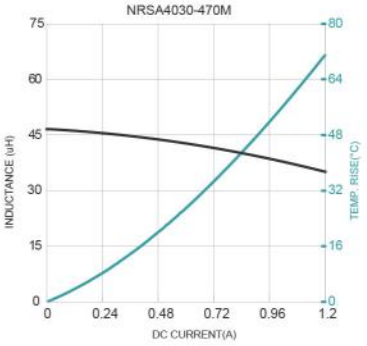


Typical Electrical Characteristics







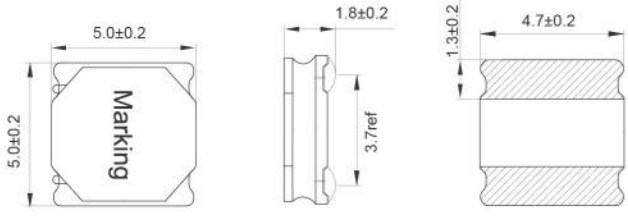


NRSA Series

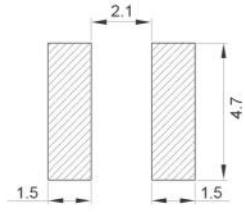
SMD Power Inductors For Automotive

5020 Size

Dimensions: [mm]



Land Pattern: [mm]



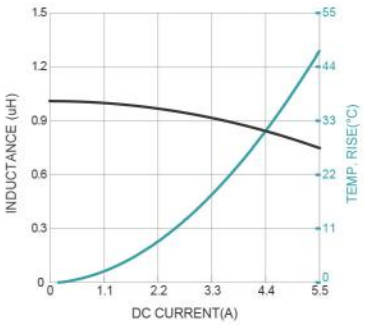
Electrical Properties

Part No	Inductance @ 100kHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	DC Resistance ±20% (mΩ)
NRSA5020-1R0N	1.0	±30%	5.00	4.10	20
NRSA5020-1R2N	1.2	±30%	4.80	3.80	20
NRSA5020-1R5N	1.5	±30%	4.50	3.50	25
NRSA5020-2R2M	2.2	±20%	4.10	3.30	32
NRSA5020-2R7M	2.7	±20%	3.80	3.00	38
NRSA5020-3R3M	3.3	±20%	3.50	2.80	43
NRSA5020-4R7M	4.7	±20%	2.70	2.40	60
NRSA5020-5R6M	5.6	±20%	2.40	2.10	69
NRSA5020-6R8M	6.8	±20%	2.10	1.90	90
NRSA5020-8R2M	8.2	±20%	1.90	1.75	98
NRSA5020-100M	10	±20%	1.70	1.60	110
NRSA5020-120M	12	±20%	1.40	1.40	135
NRSA5020-150M	15	±20%	1.30	1.25	165
NRSA5020-180M	18	±20%	1.20	1.17	190
NRSA5020-220M	22	±20%	1.10	1.10	225
NRSA5020-330M	33	±20%	0.80	0.80	335
NRSA5020-470M	47	±20%	0.70	0.70	460

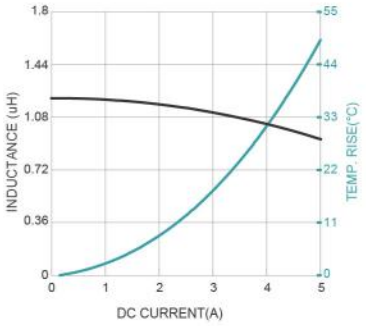
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Sacuration Current will cause Inductance to drop approximately 30% .

Typical Electrical Characteristics

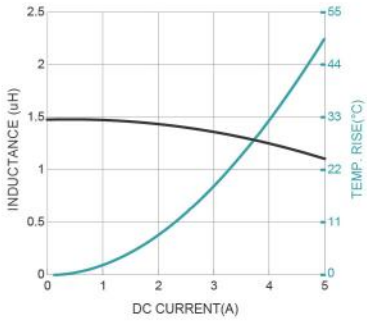
NRSA5020-1R0N



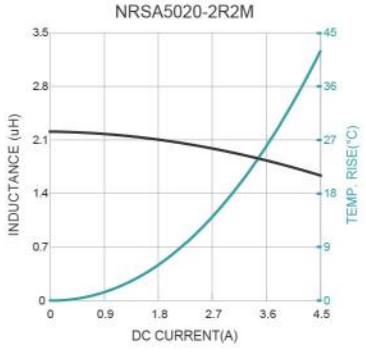
NRSA5020-1R2N



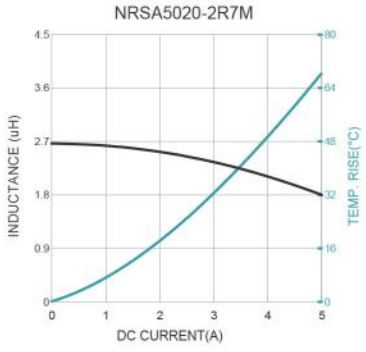
NRSA5020-1R5N



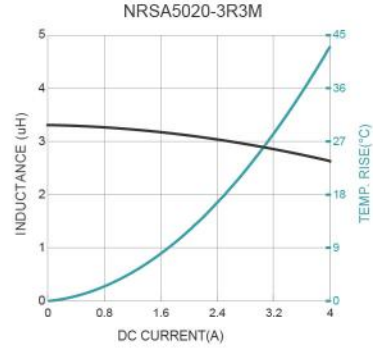
NRSA5020-2R2M



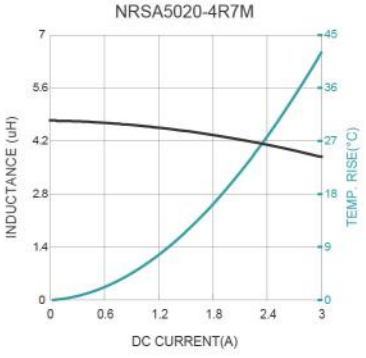
NRSA5020-2R7M



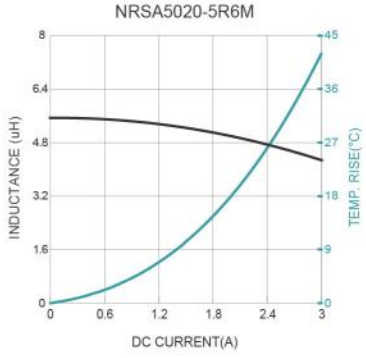
NRSA5020-3R3M



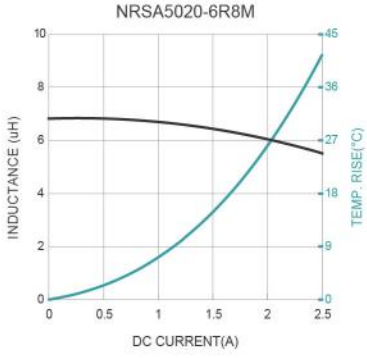
NRSA5020-4R7M



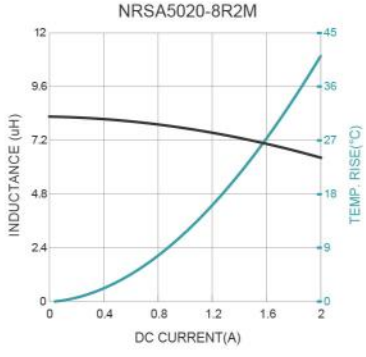
NRSA5020-5R6M



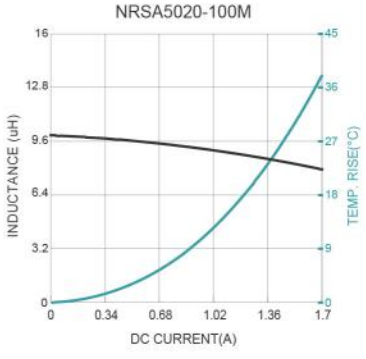
NRSA5020-6R8M



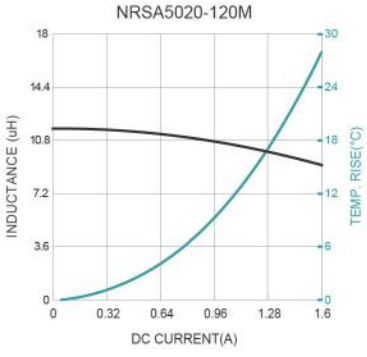
NRSA5020-8R2M



NRSA5020-100M

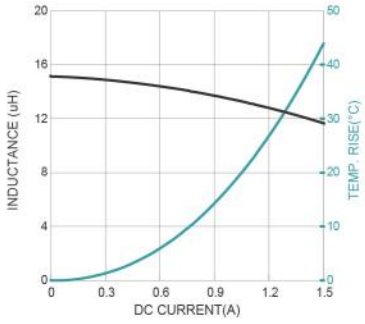


NRSA5020-120M

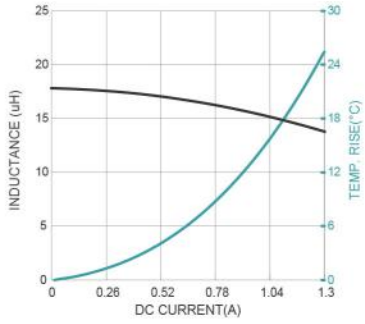


Typical Electrical Characteristics

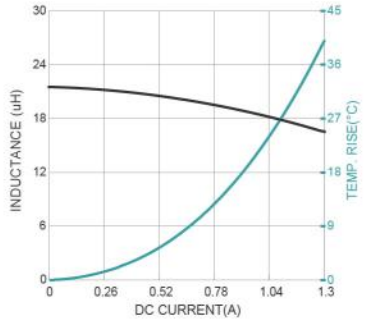
NRSA5020-150M



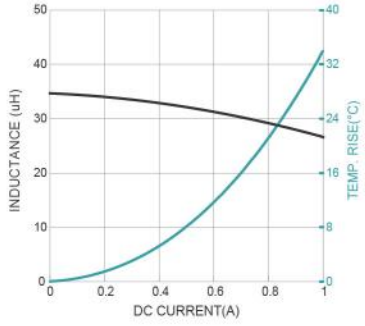
NRSA5020-180M



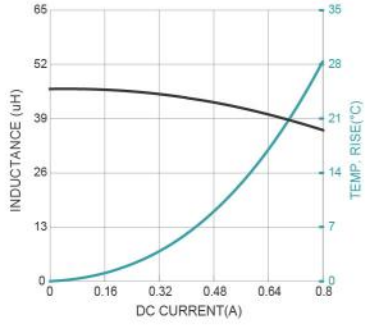
NRSA5020-220M



NRSA5020-330M



NRSA5020-470M

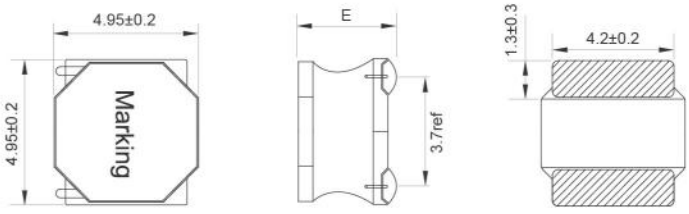


NRSA Series

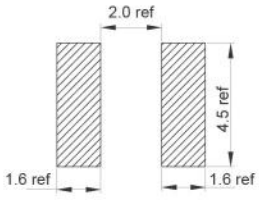
SMD Power Inductors for Automotive

5040 Size

Dimensions: [mm]



Land Pattern: [mm]



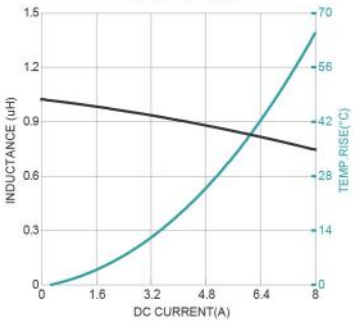
Electrical Properties

Part No	Inductance @100KHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	DC Resistance ±20% (mΩ)	E
NRSA5040-1R0M	1.0	±20%	7.50	5.00	12	3.9±0.2
NRSA5040-1R5M	1.5	±20%	6.50	4.50	15	3.9±0.2
NRSA5040-2R2M	2.2	±20%	5.70	3.80	21	3.9±0.2
NRSA5040-3R3M	3.3	±20%	4.40	3.50	24	3.9±0.2
NRSA5040-4R7M	4.7	±20%	3.90	3.20	32	3.9±0.2
NRSA5040-6R8M	6.8	±20%	3.30	2.50	43	3.9±0.2
NRSA5040-100M	10	±20%	2.52	2.20	56	3.9±0.2
NRSA5040-150M	15	±20%	2.00	1.80	80	3.8±0.2
NRSA5040-220M	22	±20%	1.62	1.50	123	3.8±0.2
NRSA5040-330M	33	±20%	1.30	1.20	180	3.8±0.2
NRSA5040-470M	47	±20%	1.10	1.00	270	3.8±0.2
NRSA5040-680M	68	±20%	0.90	0.80	400	3.8±0.2
NRSA5040-101M	100	±20%	0.75	0.72	560	3.8±0.2

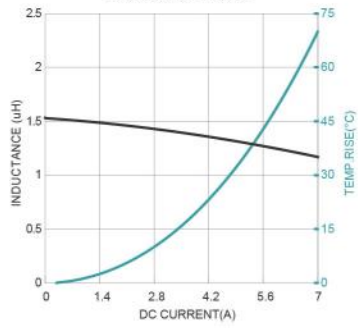
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Saturation Current will cause Inductance to drop approximately 30% .

Typical Electrical Characteristics

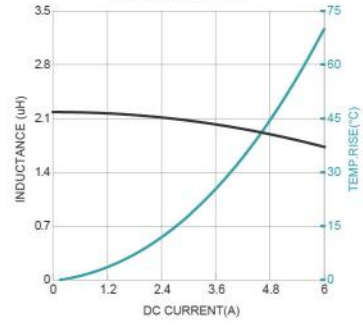
NRSA5040-1R0M



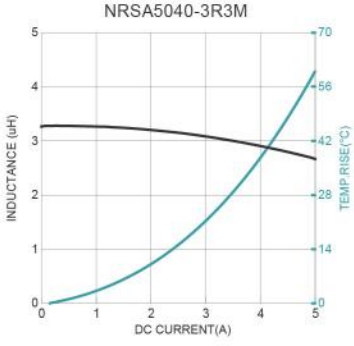
NRSA5040-1R5M



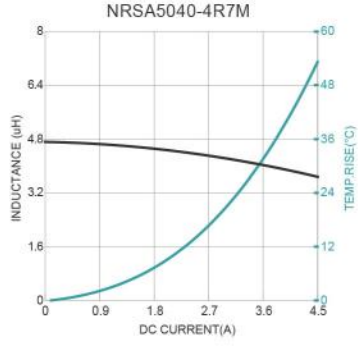
NRSA5040-2R2M



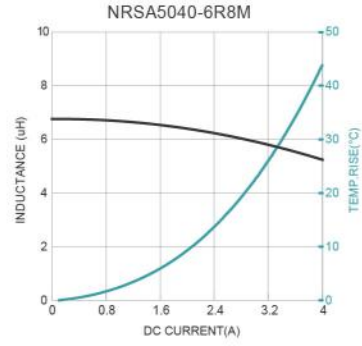
NRSA5040-3R3M



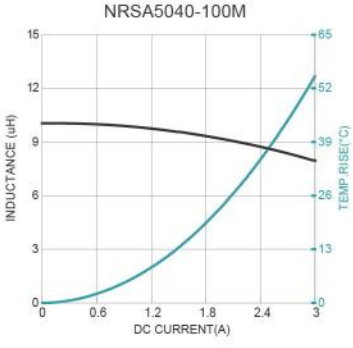
NRSA5040-4R7M



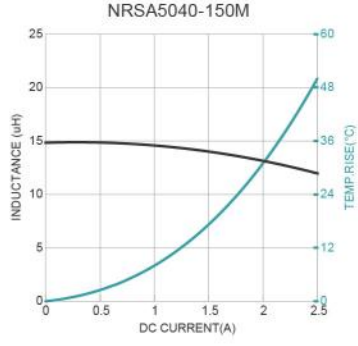
NRSA5040-6R8M



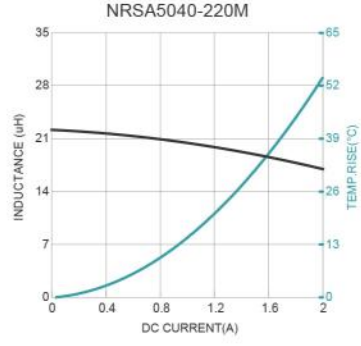
NRSA5040-100M



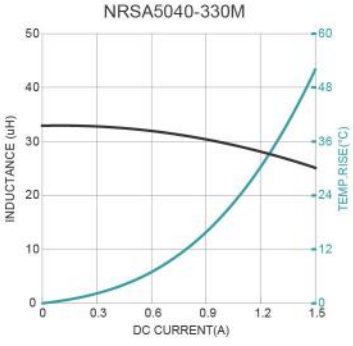
NRSA5040-150M



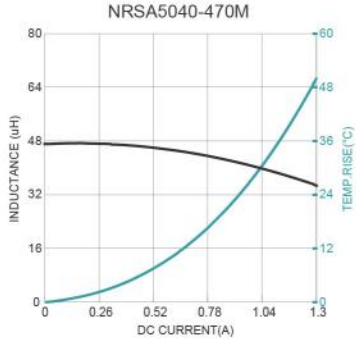
NRSA5040-220M



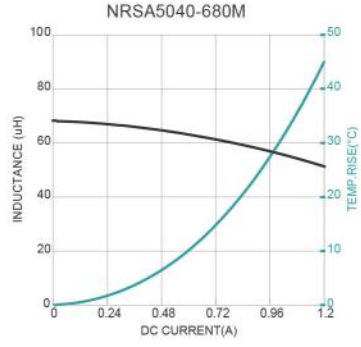
NRSA5040-330M



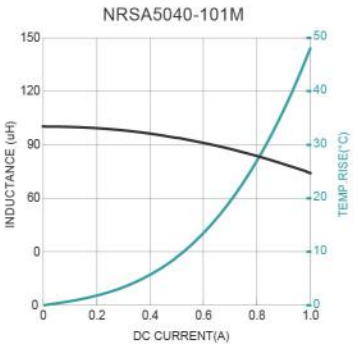
NRSA5040-470M



NRSA5040-680M



Typical Electrical Characteristics

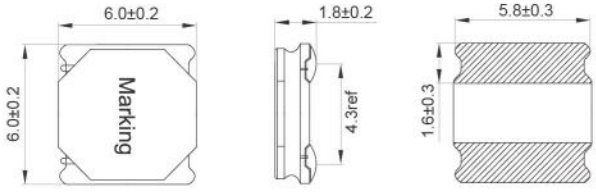


NRSA Series

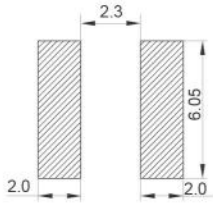
SMD Power Inductors For Automotive

6020 Size

Dimensions: [mm]



Land Pattern: [mm]



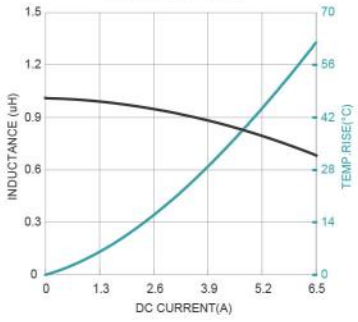
Electrical Properties

Part No	Inductance @ 100kHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	DC Resistance ±20% (mΩ)
NRSA6020-1R0M	1.0	±20%	6.20	4.50	19
NRSA6020-1R5M	1.5	±20%	5.50	3.80	22.5
NRSA6020-2R0M	2.0	±20%	5.30	3.65	25
NRSA6020-2R2M	2.2	±20%	5.00	3.50	29
NRSA6020-3R3M	3.3	±20%	4.00	3.30	35
NRSA6020-4R7M	4.7	±20%	3.00	2.80	54
NRSA6020-5R6M	5.6	±20%	2.70	2.60	59
NRSA6020-6R8M	6.8	±20%	2.60	2.50	78
NRSA6020-8R2M	8.2	±20%	2.40	2.30	103
NRSA6020-100M	10	±20%	2.10	2.10	106
NRSA6020-150M	15	±20%	1.50	1.60	138
NRSA6020-220M	22	±20%	1.30	1.40	204

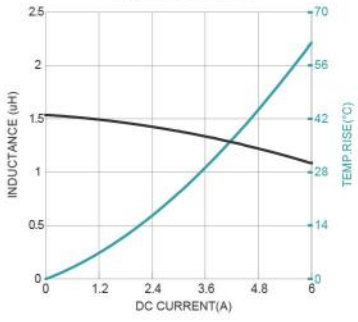
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Sacuration Current will cause Inductance to drop approximately 30% .

Typical Electrical Characteristics

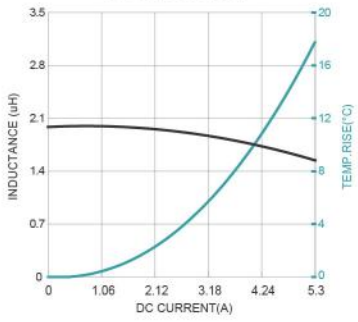
NRSA6020-1R0M



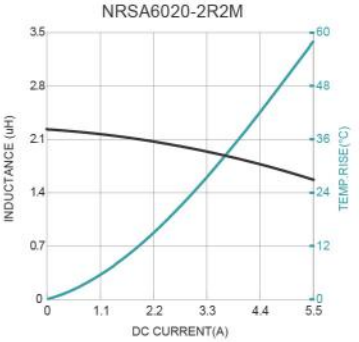
NRSA6020-1R5M



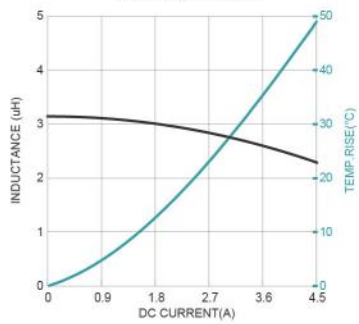
NRSA6020-2R0M



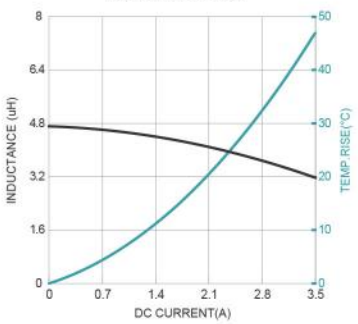
NRSA6020-2R2M



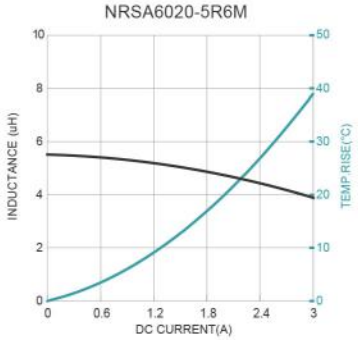
NRSA6020-3R3M



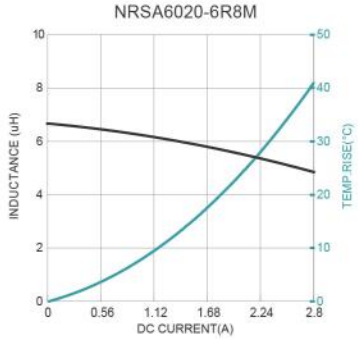
NRSA6020-4R7M



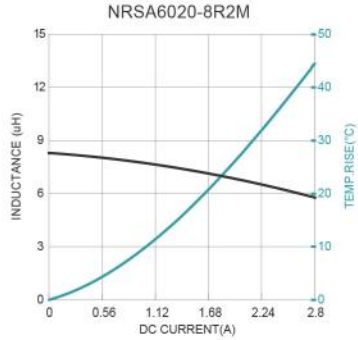
NRSA6020-5R6M



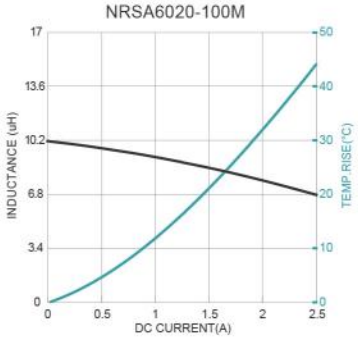
NRSA6020-6R8M



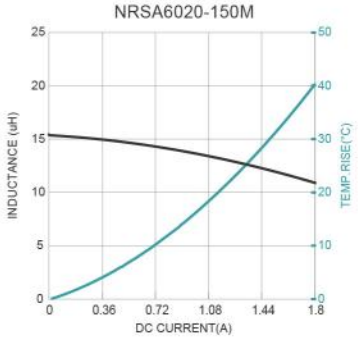
NRSA6020-8R2M



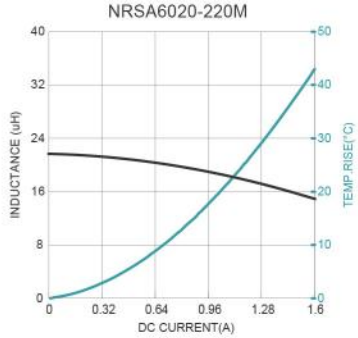
NRSA6020-100M



NRSA6020-150M



NRSA6020-220M

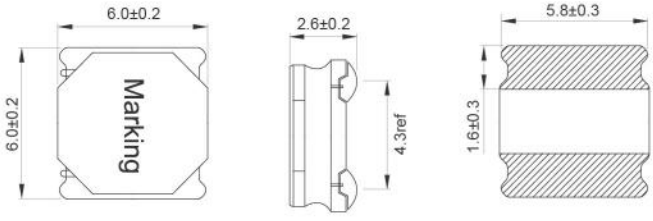


NRSA Series

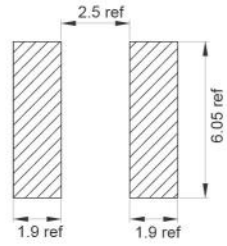
SMD Power Inductors For Automotive

6028 Size

Dimensions: [mm]



Land Pattern: [mm]



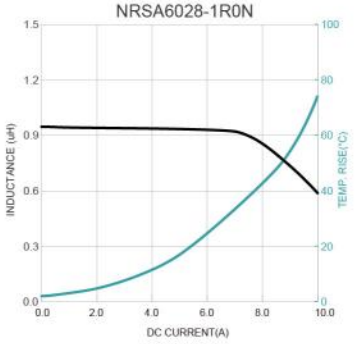
Electrical Properties

Part No	Inductance @ 100kHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	DC Resistance ±20% (mΩ)
NRSA6028-1R0N	1.0	±30%	5.75	5.20	10
NRSA6028-1R5N	1.5	±30%	5.30	4.95	14
NRSA6028-2R2M	2.2	±20%	5.00	4.50	18
NRSA6028-3R3M	3.3	±20%	4.30	3.60	24
NRSA6028-4R7M	4.7	±20%	3.20	3.10	30
NRSA6028-6R8M	6.8	±20%	2.85	2.50	47
NRSA6028-100M	10	±20%	2.10	2.00	65
NRSA6028-150M	15	±20%	2.00	1.80	98
NRSA6028-220M	22	±20%	1.60	1.50	138
NRSA6028-330M	33	±20%	1.40	1.30	200
NRSA6028-470M	47	±20%	1.15	1.06	280
NRSA6028-680M	68	±20%	1.00	0.81	420
NRSA6028-101M	100	±20%	0.80	0.72	605

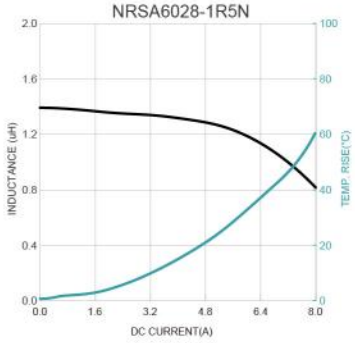
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Sacuration Current will cause Inductance to drop approximately 30% .

Typical Electrical Characteristics

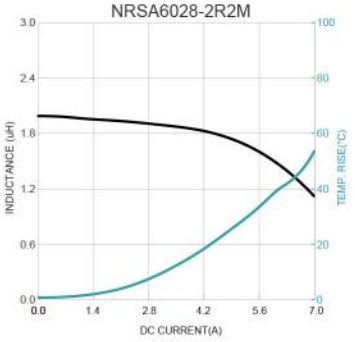
NRSA6028-1R0N



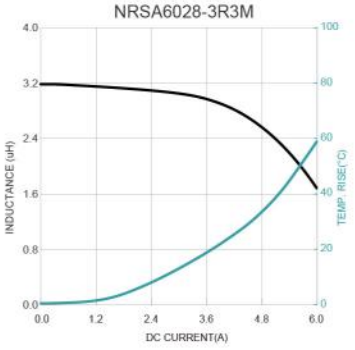
NRSA6028-1R5N



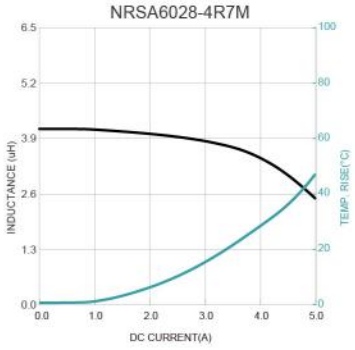
NRSA6028-2R2M



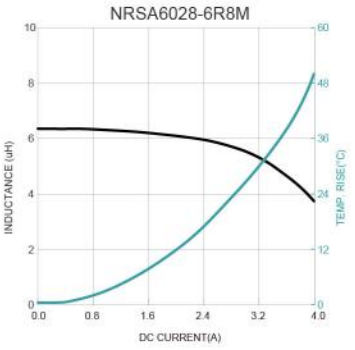
NRSA6028-3R3M



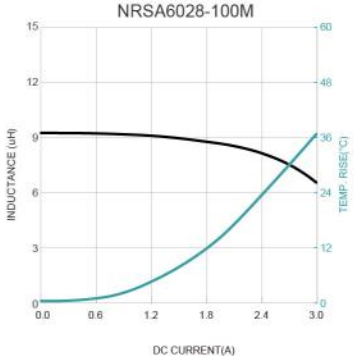
NRSA6028-4R7M



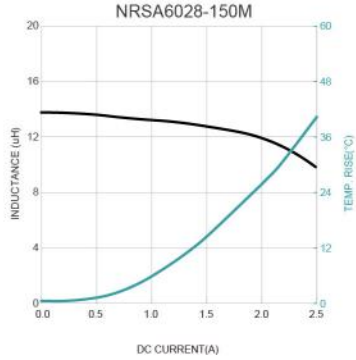
NRSA6028-6R8M



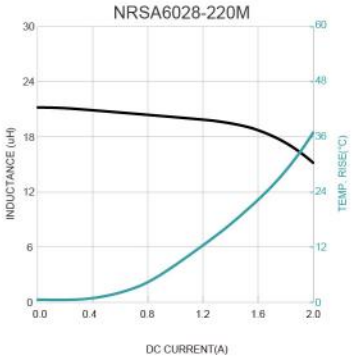
NRSA6028-100M



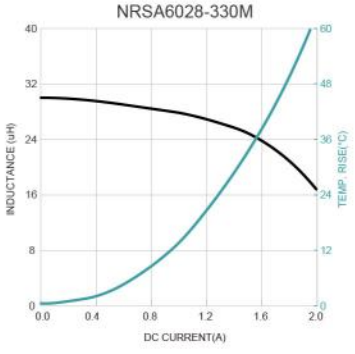
NRSA6028-150M



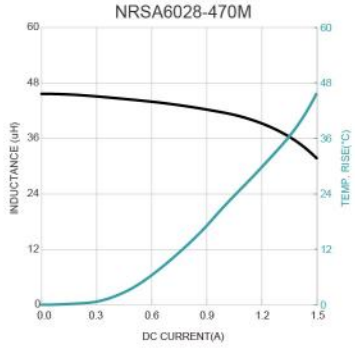
NRSA6028-220M



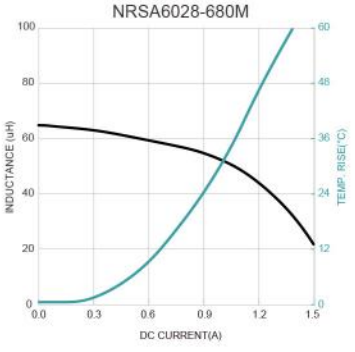
NRSA6028-330M



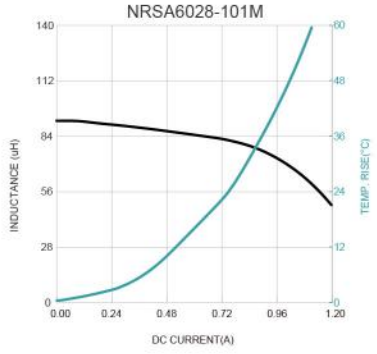
NRSA6028-470M



NRSA6028-680M



Typical Electrical Characteristics

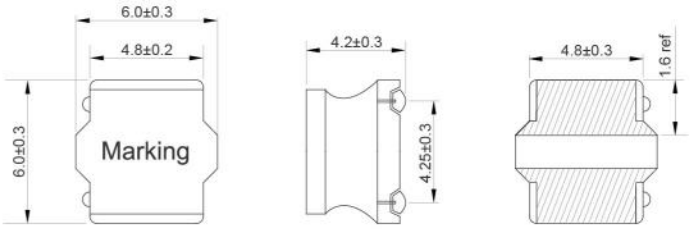


NRSA Series

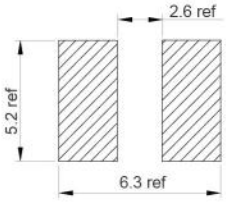
SMD Power Inductors For Automotive

6045 Size

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties

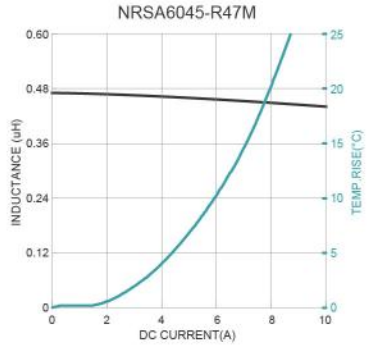
Part No	Inductance @100KHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Saturation Current Max. (A)	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	DC Resistance ±20% (mΩ)
NRSA6045-R47M	0.47	±20%	17.00	16.00	8.60	8.00	6.8
NRSA6045-R82M	0.82	±20%	14.50	13.50	8.20	7.50	8.5
NRSA6045-1R0M	1.0	±20%	13.50	12.50	8.00	7.30	10.0
NRSA6045-1R2M	1.2	±20%	12.50	11.50	7.50	7.00	10.5
NRSA6045-1R3M	1.3	±20%	12.50	11.50	7.50	7.00	10.5
NRSA6045-1R5M	1.5	±20%	12.00	11.00	7.00	6.60	11.7
NRSA6045-1R8M	1.8	±20%	11.00	10.00	6.80	6.20	12.0
NRSA6045-2R0M	2.0	±20%	10.50	9.50	6.50	5.80	13.5
NRSA6045-2R2M	2.2	±20%	9.50	8.55	6.00	5.30	15.0
NRSA6045-2R3M	2.3	±20%	9.30	8.20	5.80	5.00	16.0
NRSA6045-3R0M	3.0	±20%	8.00	7.50	5.20	4.60	20.0
NRSA6045-3R3M	3.3	±20%	7.80	7.30	5.00	4.50	21.0
NRSA6045-3R6M	3.6	±20%	7.40	6.90	4.90	4.30	22.5
NRSA6045-4R7M	4.7	±20%	6.80	6.20	4.50	4.00	26.0
NRSA6045-5R6M	5.6	±20%	6.40	5.70	4.10	3.70	31.0
NRSA6045-6R3M	6.3	±20%	5.90	5.30	3.80	3.50	33.0
NRSA6045-6R8M	6.8	±20%	5.70	5.15	3.60	3.30	34.0

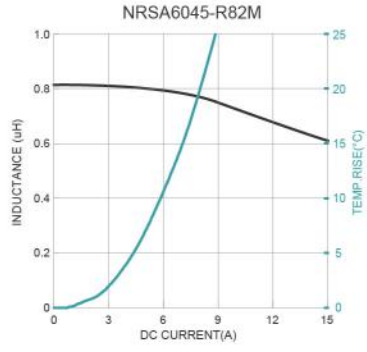
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Sacuration Current will cause Inductance to drop approximately 30% .

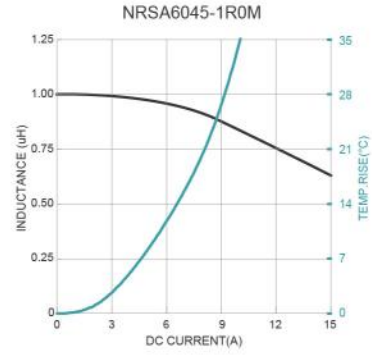
Part No	Inductance @100KHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Saturation Current Max. (A)	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	DC Resistance ±20% (mΩ)
NRSA6045-8R2M	8.2	±20%	5.10	4.50	3.40	2.90	46.0
NRSA6045-100M	10	±20%	4.60	4.20	3.20	2.60	52.0
NRSA6045-150M	15	±20%	3.80	3.30	2.80	2.20	71.0
NRSA6045-180M	18	±20%	3.40	2.90	2.60	2.10	80.0
NRSA6045-220M	22	±20%	3.30	2.70	2.30	1.90	96.0
NRSA6045-330M	33	±20%	2.50	2.10	1.80	1.50	145
NRSA6045-470M	47	±20%	2.00	1.75	1.60	1.20	200
NRSA6045-560M	56	±20%	1.80	1.65	1.40	1.00	230
NRSA6045-680M	68	±20%	1.60	1.52	1.10	0.92	305
NRSA6045-820M	82	±20%	1.50	1.40	0.98	0.88	365
NRSA6045-101M	100	±20%	1.33	1.25	0.92	0.82	456
NRSA6045-121M	120	±20%	1.20	1.10	0.85	0.79	500
NRSA6045-181M	180	±20%	1.00	0.90	0.68	0.60	745
NRSA6045-221M	220	±20%	0.88	0.77	0.60	0.50	900

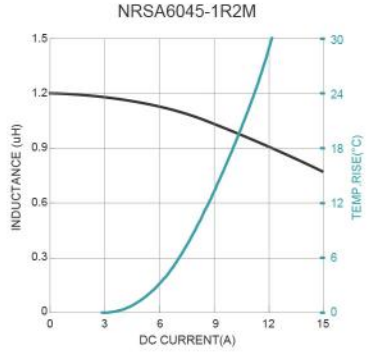
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Saturation Current will cause Inductance to drop approximately 30% .

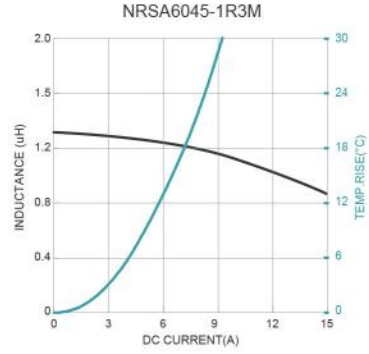
Typical Electrical Characteristics

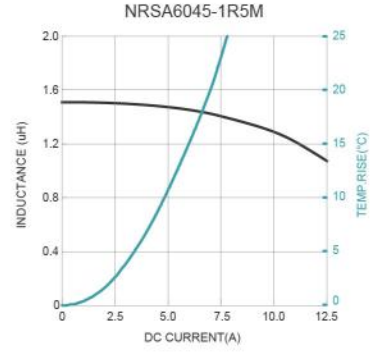






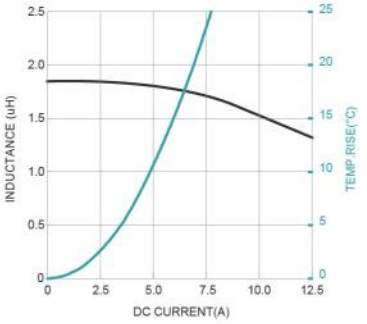




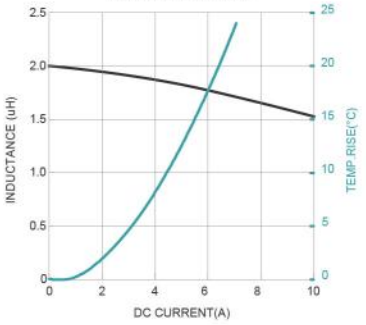


Typical Electrical Characteristics

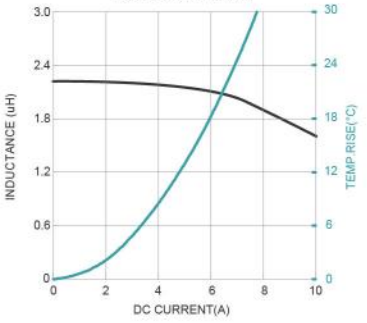
NRSA6045-1R8M



NRSA6045-2R0M



NRSA6045-2R2M



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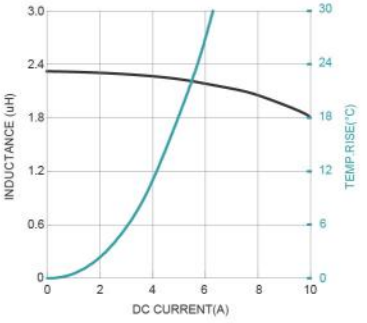
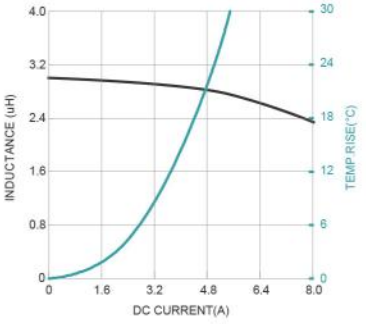
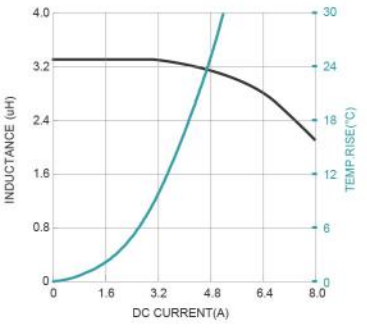


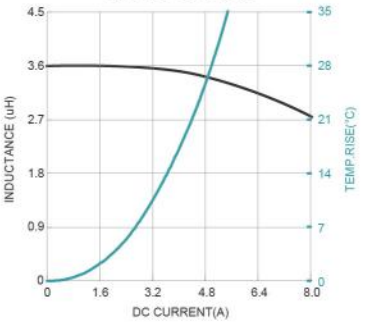
NRSA6045-3R0M



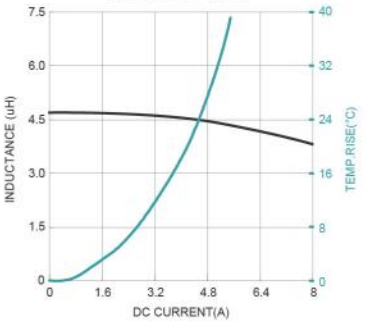
NRSA6045-3R3M



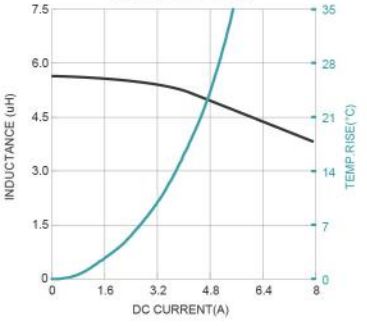
NRSA6045-3R6M



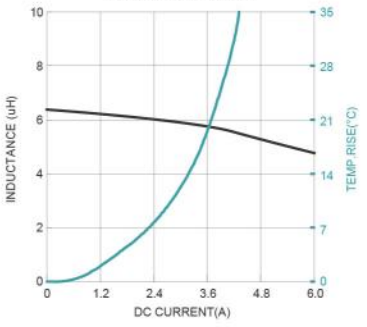
NRSA6045-4R7M



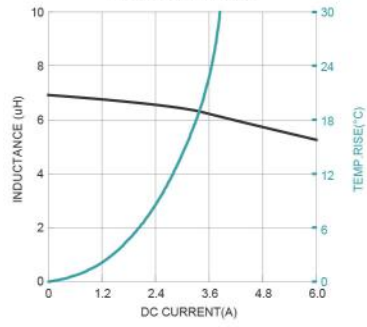
NRSA6045-5R6M



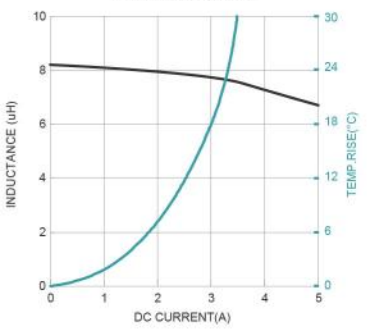
NRSA6045-6R3M



NRSA6045-6R8M

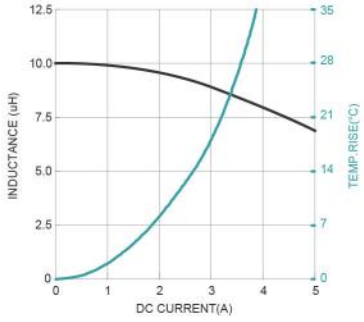


NRSA6045-8R2M

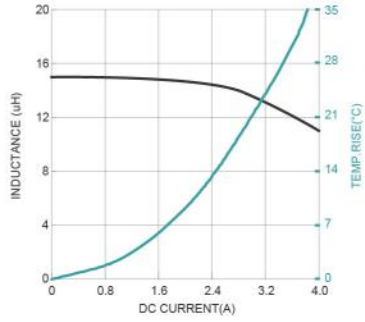


Typical Electrical Characteristics

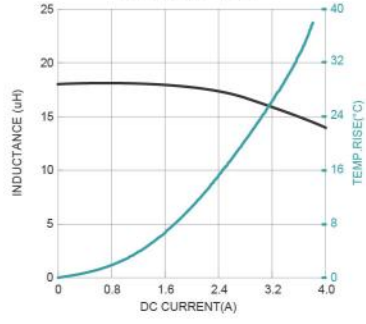
NRSA6045-100M



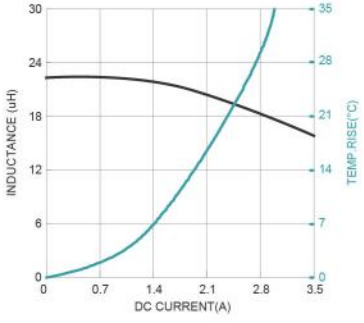
NRSA6045-150M



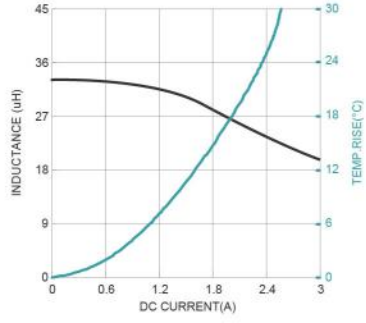
NRSA6045-180M



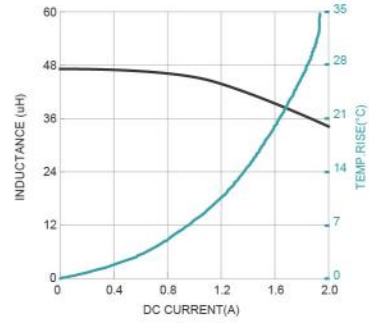
NRSA6045-220M



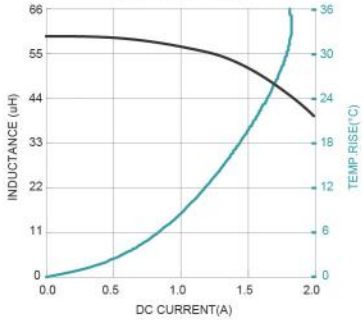
NRSA6045-330M



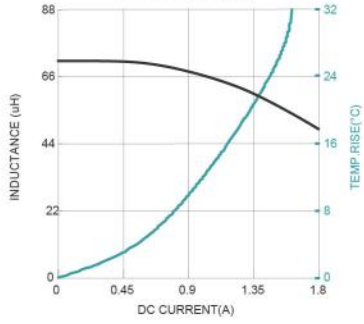
NRSA6045-470M



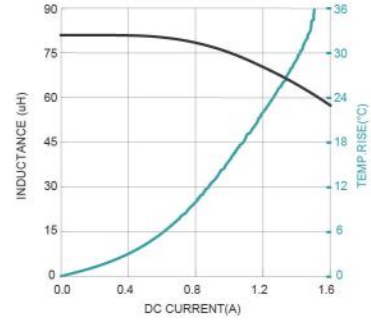
NRSA6045-560M



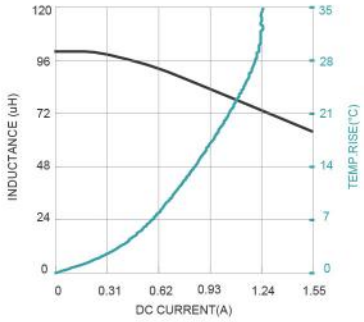
NRSA6045-680M



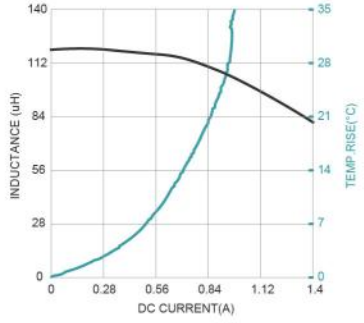
NRSA6045-820M



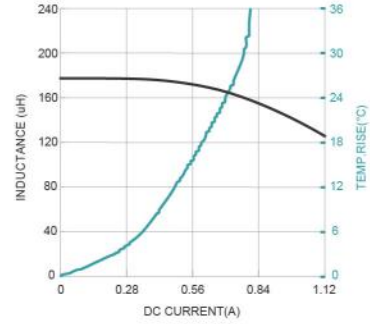
NRSA6045-101M



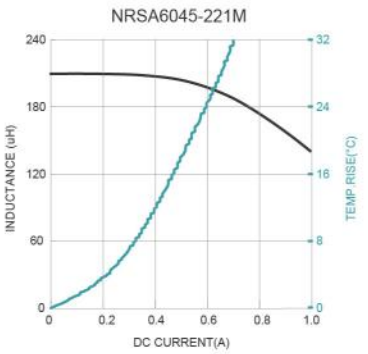
NRSA6045-121M



NRSA6045-181M



Typical Electrical Characteristics

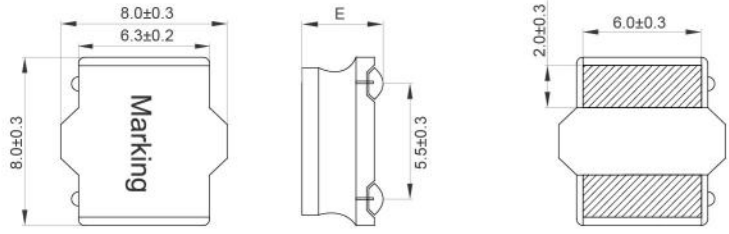


NRSA Series

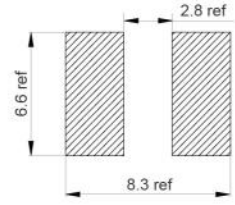
SMD Power Inductors For Automotive

8040 Size

Dimensions: [mm]



Land Pattern: [mm]



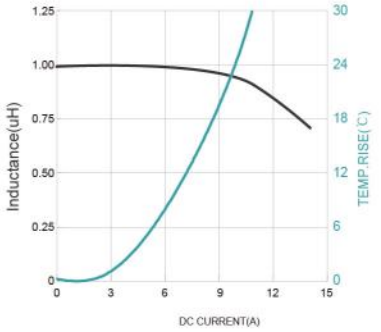
Electrical Properties

Part No	L@100KHz/1V (μH)	Tolerance	I_{SAT} Typ. (A)	I_{SAT} Max. (A)	I_R Typ. (A)	I_R Max. (A)	R_{DC} ±20% (mΩ)	E
NRSA8040-1R0M	1.0	±20%	13.8	13.0	8.50	8.00	8.20	4.2 Max
NRSA8040-1R4M	1.4	±20%	11.8	11.2	8.20	7.80	10.0	4.2 Max
NRSA8040-1R5M	1.5	±20%	11.5	11.0	8.00	7.70	10.0	4.2 Max
NRSA8040-2R2M	2.2	±20%	9.80	9.20	7.40	6.90	11.5	4.2 Max
NRSA8040-3R3M	3.3	±20%	8.00	7.50	6.60	6.20	15.0	4.2 Max
NRSA8040-4R7M	4.7	±20%	6.70	6.00	5.80	5.30	19.5	4.2 Max
NRSA8040-5R6M	5.6	±20%	6.20	5.80	5.40	5.20	22.0	4.2 Max
NRSA8040-6R8M	6.8	±20%	5.60	5.10	5.10	5.00	25.0	4.2 Max
NRSA8040-8R2M	8.2	±20%	5.30	4.60	4.80	4.50	30.0	4.2 Max
NRSA8040-100M	10	±20%	5.00	4.30	4.60	4.20	33.0	4.2 Max
NRSA8040-150M	15	±20%	4.00	3.60	3.60	3.20	50.0	3.7±0.3
NRSA8040-220M	22	±20%	3.10	2.80	2.90	2.45	73.0	3.7±0.3
NRSA8040-330M	33	±20%	2.60	2.10	2.30	2.10	100	3.7±0.3
NRSA8040-470M	47	±20%	2.20	1.90	2.00	1.70	135	3.7±0.3
NRSA8040-560M	56	±20%	1.90	1.60	1.72	1.60	160	3.7±0.3
NRSA8040-680M	68	±20%	1.75	1.50	1.65	1.50	205	3.7±0.3
NRSA8040-820M	82	±20%	1.60	1.40	1.40	1.30	230	3.7±0.3
NRSA8040-101M	100	±20%	1.45	1.20	1.20	1.10	300	3.7±0.3
NRSA8040-151M	150	±20%	1.20	1.03	0.98	0.90	410	3.7±0.3
NRSA8040-221M	220	±20%	0.99	0.90	0.85	0.76	610	3.7±0.3

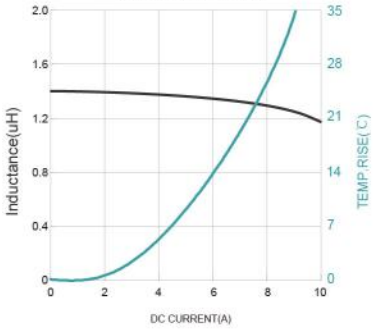
Temperature Rise Current will cause the coil temperature rise approximately △t40℃
Sacuration Current will cause Inductance to drop approximately 30% .

Typical Electrical Characteristics

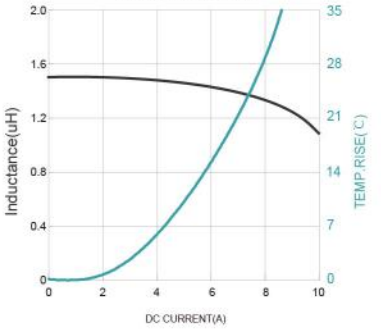
NRSA8040-1R0M



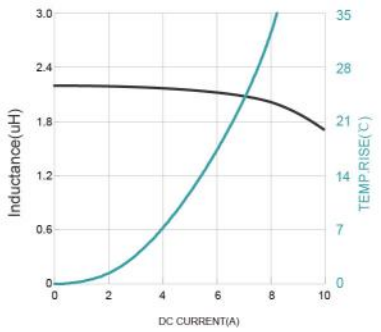
NRSA8040-1R4M



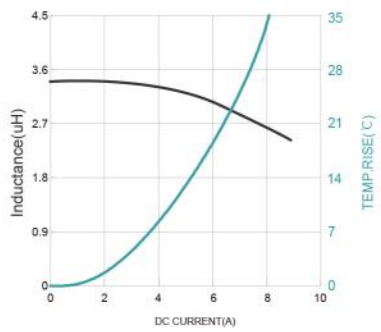
NRSA8040-1R5M



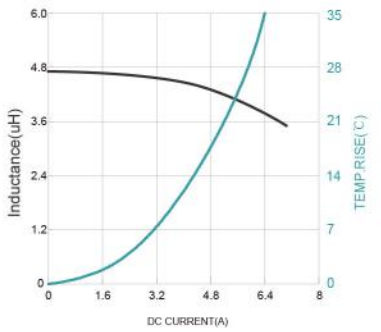
NRSA8040-2R2M



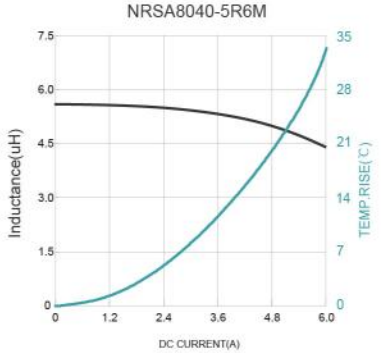
NRSA8040-3R3M



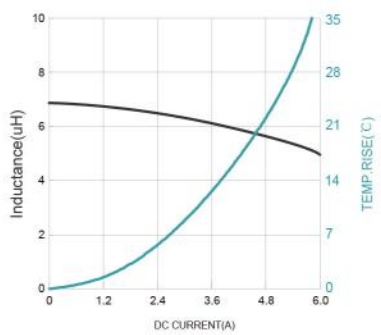
NRSA8040-4R7M



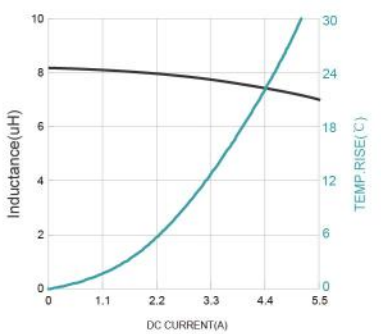
NRSA8040-5R6M



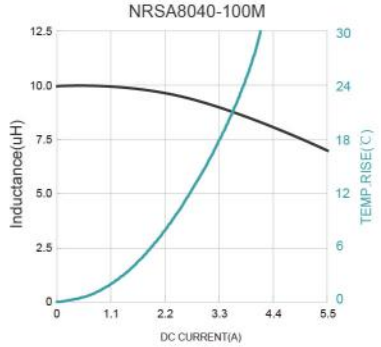
NRSA8040-6R8M



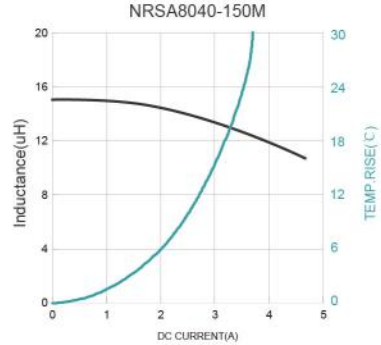
NRSA8040-8R2M



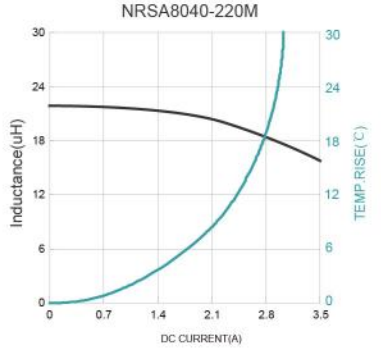
NRSA8040-100M



NRSA8040-150M

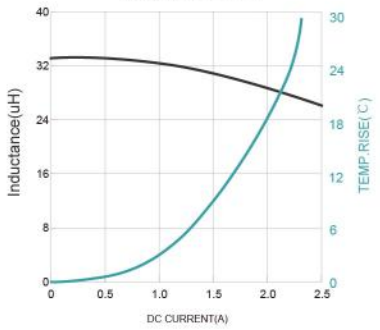


NRSA8040-220M

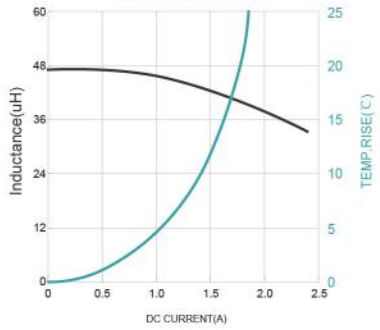


Typical Electrical Characteristics

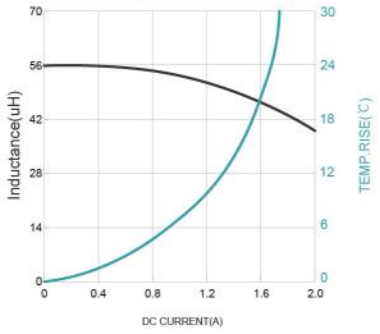
NRSA8040-330M



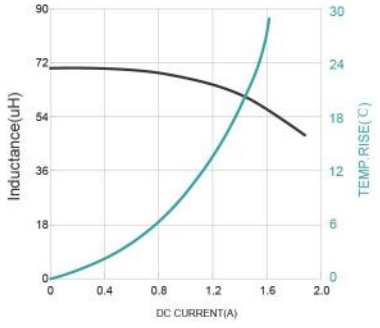
NRSA8040-470M



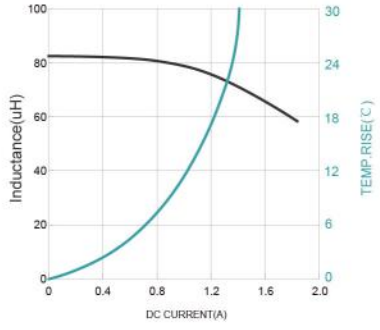
NRSA8040-560M



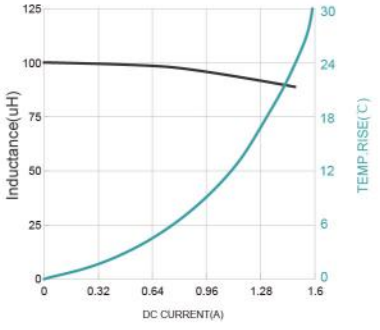
NRSA8040-680M



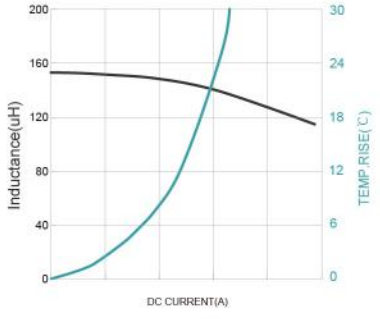
NRSA8040-820M



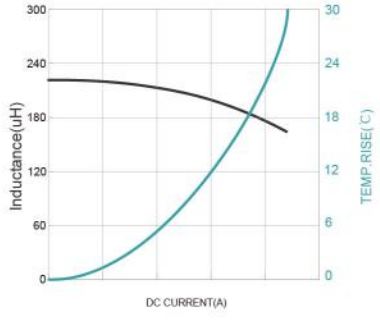
NRSA8040-101M



NRSA8040-151M



NRSA8040-221M



MDA Series

SMD Low Profile High Current Molded Inductor

FEATURES

- Shielded construction
- Capable of corresponding high frequency
- Low loss realized with low DCR
- High performance (Isat) realized by metal dust core
- Ultra low buzz noise, due to composite construction
- 100% Lead(Pb)-Free and RoHS compliant
- AEC-Q200 qualified
- Operating temperature: -55 to +155 °C

APPLICATION

- Noise filter for various drive circuitry requiring high temp.
- operation and peak current handing capability.
- Boost-Converter
- Buck-Converter DC/DC


MDA4020 P96


MDA5030 P98


MDA7030 P100


MDA7050 P104


MDA7054HT P107


MDA1040 P110


MDA1050 P113


MDA1054HT P116


MDA1350 P118


MDA1360 P121


MDA1365 P123


MDA1870 P126

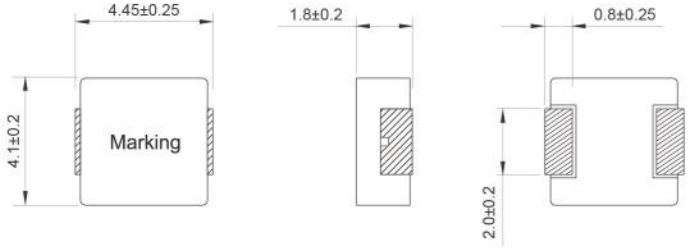

MDA2313 P129

MDA Series

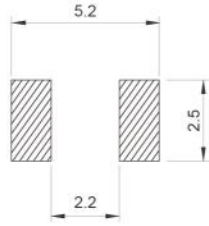
SMD Low Profile High Current Molded Inductor

4020 Size

Dimensions: [mm]



Land Pattern: [mm]



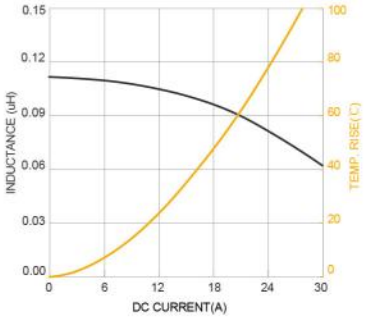
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA4020-R10M	0.10	±20%	16.0	14.0	26.0	22.0	2.90	3.20
MDA4020-R47M	0.47	±20%	10.0	9.0	9.0	8.0	9.50	11.0
MDA4020-R68M	0.68	±20%	9.0	8.0	7.6	6.6	11.6	13.5
MDA4020-1R0M	1.00	±20%	7.5	6.5	5.5	5.0	19.0	22.0
MDA4020-1R5M	1.50	±20%	6.7	5.8	5.2	4.8	27.0	31.0
MDA4020-2R2M	2.20	±20%	5.5	5.0	4.5	4.0	41.0	48.0
MDA4020-3R3M	3.30	±20%	4.5	3.5	3.1	2.7	65.0	75.0
MDA4020-4R7M	4.70	±20%	3.8	3.2	2.8	2.5	84.0	95.0
MDA4020-5R6M	5.60	±20%	3.2	2.8	2.6	2.3	97.0	115
MDA4020-6R8M	6.80	±20%	2.9	2.5	2.4	2.1	131	157
MDA4020-8R2M	8.20	±20%	2.6	2.3	2.2	2.0	140	168
MDA4020-100M	10.0	±20%	2.4	2.2	2.1	1.9	165	215

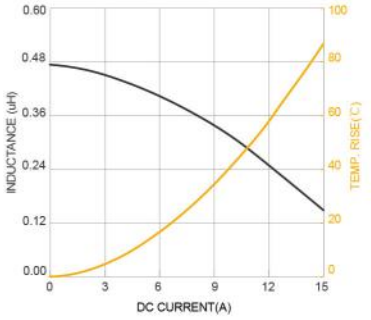
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

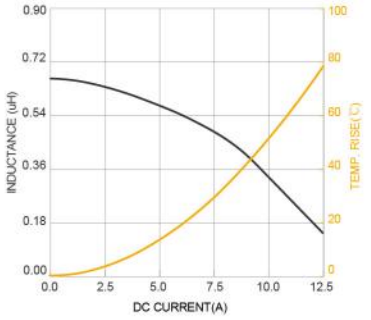
MDA4020-R10M



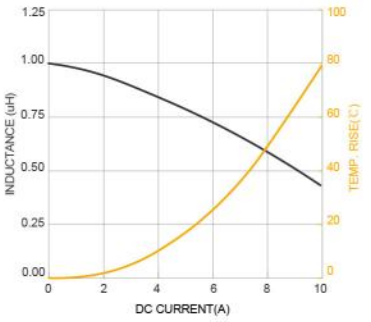
MDA4020-R47M



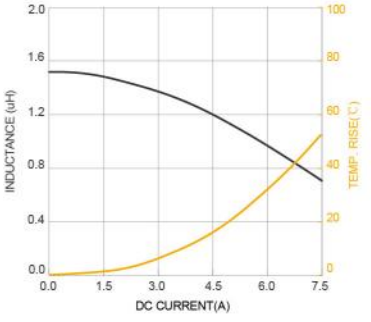
MDA4020-R68M



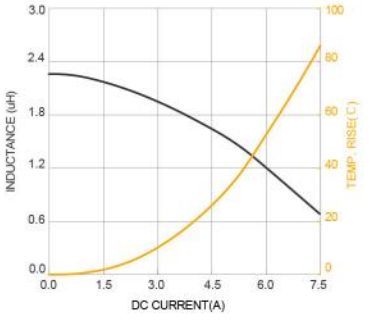
MDA4020-1R0M



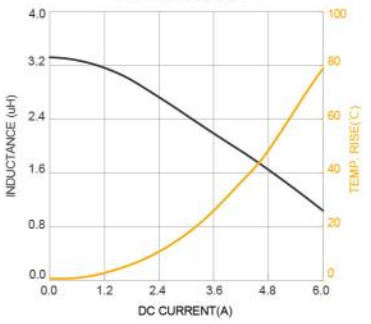
MDA4020-1R5M



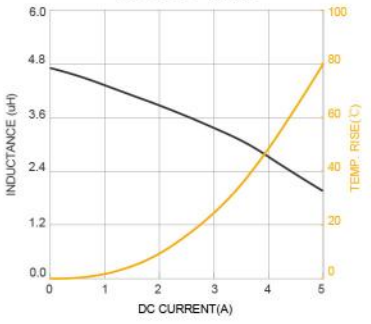
MDA4020-2R2M



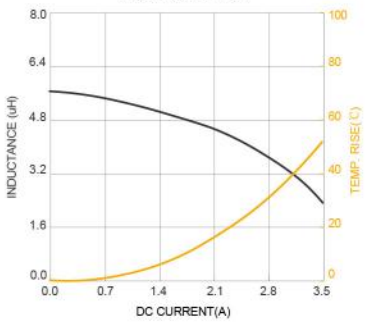
MDA4020-3R3M



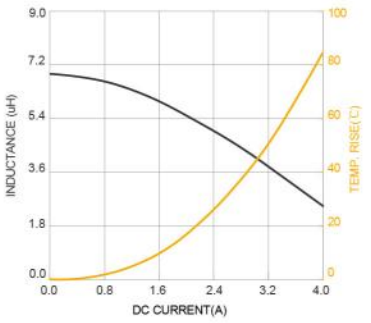
MDA4020-4R7M



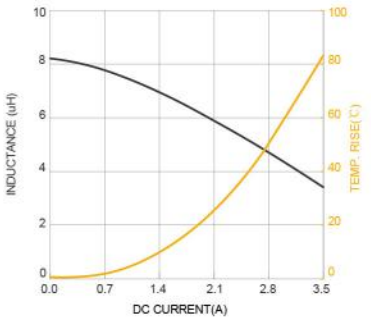
MDA4020-5R6M



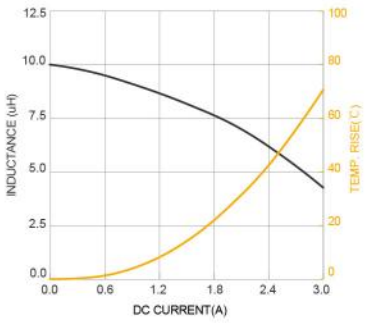
MDA4020-6R8M



MDA4020-8R2M



MDA4020-100M

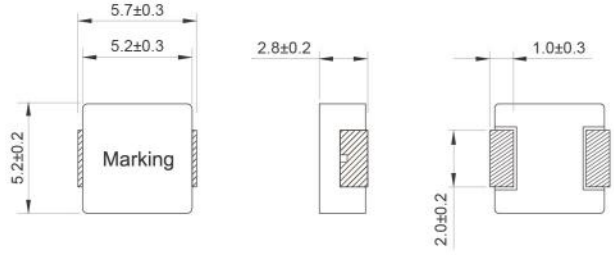


MDA Series

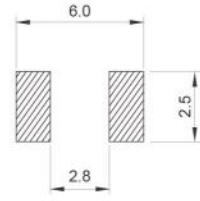
SMD Low Profile High Current Molded Inductor

5030 Size

Dimensions: [mm]



Land Pattern: [mm]



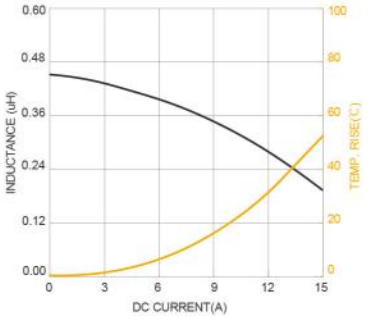
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA5030-R47M	0.47	±20%	13.5	12.0	10.0	9.0	5.20	6.00
MDA5030-R68M	0.68	±20%	12.5	11.0	9.0	8.0	7.40	8.50
MDA5030-R82M	0.82	±20%	10.0	9.0	8.8	7.7	8.00	9.20
MDA5030-1R0M	1.00	±20%	9.0	8.0	8.5	7.5	10.5	12.0
MDA5030-1R5M	1.50	±20%	8.0	7.0	7.5	6.5	13.6	15.7
MDA5030-2R2M	2.20	±20%	7.0	6.5	6.5	5.8	21.6	25.0
MDA5030-3R3M	3.30	±20%	6.3	5.8	6.0	5.3	28.0	33.0
MDA5030-4R7M	4.70	±20%	5.5	4.8	5.3	4.6	38.0	44.0
MDA5030-5R6M	5.60	±20%	5.0	4.3	4.6	4.0	50.0	58.0
MDA5030-6R8M	6.80	±20%	4.3	3.7	3.5	3.1	57.0	66.0
MDA5030-100M	10.0	±20%	3.8	3.4	2.5	2.1	88.0	103.0
MDA5030-150M	15.0	±20%	2.9	2.5	2.2	1.7	140.0	170.0

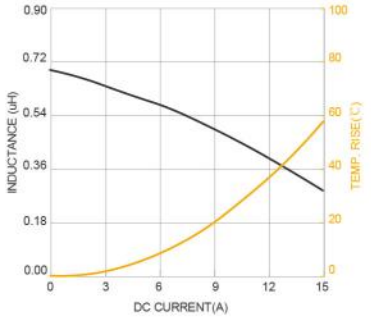
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

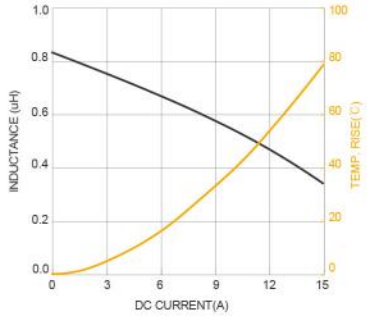
MDA5030-R47M



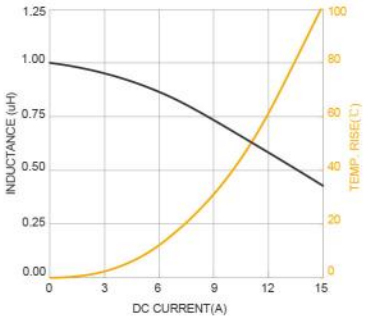
MDA5030-R68M



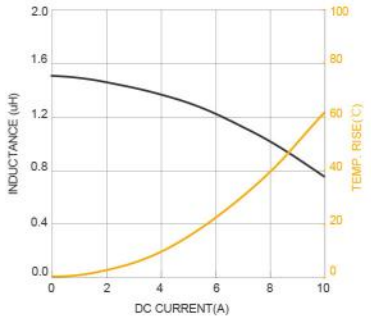
MDA5030-R82M



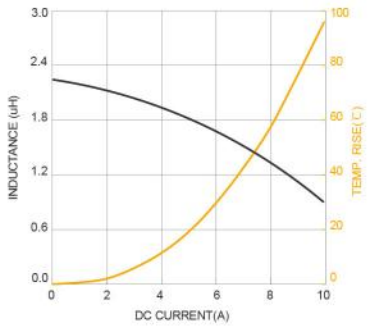
MDA5030-1R0M



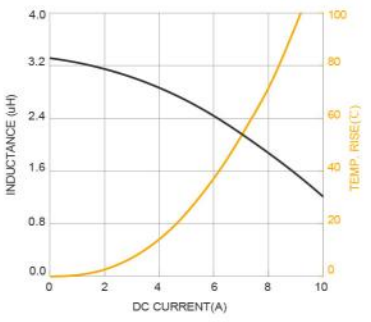
MDA5030-1R5M



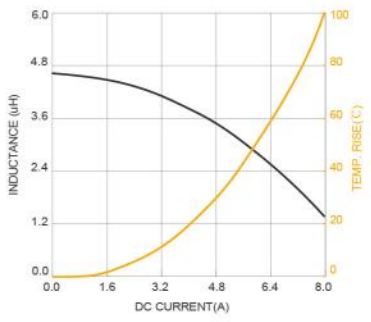
MDA5030-2R2M



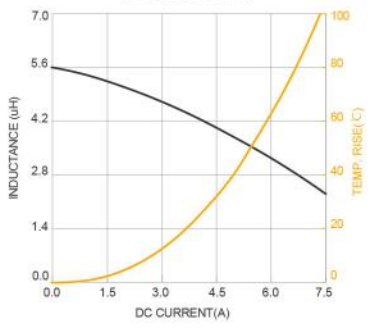
MDA5030-3R3M



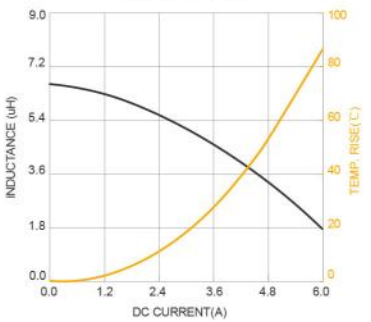
MDA5030-4R7M



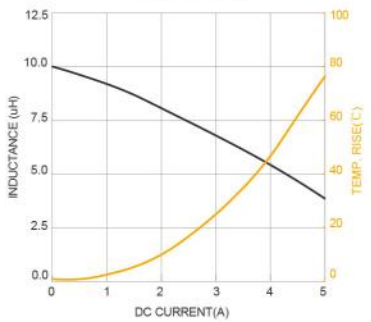
MDA5030-5R6M



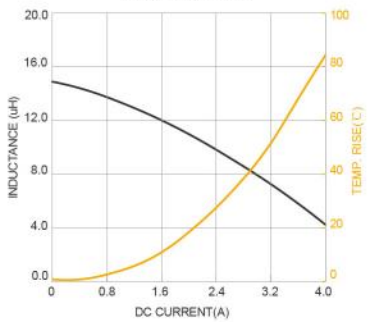
MDA5030-6R8M



MDA5030-100M



MDA5030-150M

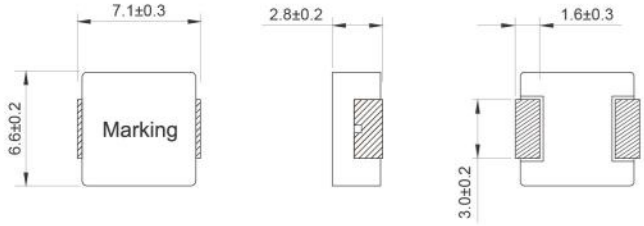


MDA Series

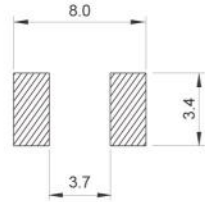
SMD Low Profile High Current Molded Inductor

7030 Size

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties

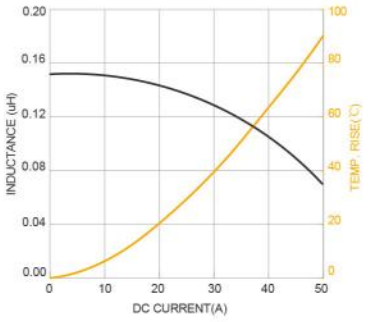
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA7030-R15N	0.15	±30%	30.0	25.0	40.0	36.0	1.70	2.10
MDA7030-R22M	0.22	±20%	23.0	21.0	34.0	32.0	2.00	2.50
MDA7030-R33M	0.33	±20%	21.0	20.0	25.0	22.0	2.80	3.40
MDA7030-R36M	0.36	±20%	20.0	18.0	24.0	21.0	3.30	3.90
MDA7030-R47M	0.47	±20%	18.0	16.0	20.0	18.0	3.40	4.00
MDA7030-R56M	0.56	±20%	16.5	15.0	18.0	16.0	3.90	4.50
MDA7030-R68M	0.68	±20%	16.0	14.5	17.0	15.0	4.70	5.30
MDA7030-R82M	0.82	±20%	14.0	13.0	16.0	14.0	5.40	6.00
MDA7030-1R0M	1.00	±20%	12.0	11.0	15.0	13.5	6.70	7.40
MDA7030-1R2M	1.20	±20%	10.0	9.5	14.0	12.5	7.70	9.50
MDA7030-1R5M	1.50	±20%	10.0	9.0	14.0	12.0	10.2	12.1
MDA7030-2R2M	2.20	±20%	8.0	7.5	10.0	9.0	13.5	15.0
MDA7030-3R3M	3.30	±20%	6.5	6.0	9.5	8.5	19.0	22.0
MDA7030-4R7M	4.70	±20%	5.5	5.0	6.5	5.5	28.0	33.0
MDA7030-5R6M	5.60	±20%	5.5	5.0	6.0	5.2	39.0	42.0
MDA7030-6R8M	6.80	±20%	4.5	4.2	6.0	5.0	43.0	50.0

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA7030-8R2M	8.20	±20%	4.5	4.0	6.0	4.7	54.0	60.0
MDA7030-100M	10.0	±20%	4.0	3.5	5.5	4.5	62.0	68.0
MDA7030-150M	15.0	±20%	3.0	2.5	4.5	4.0	110	140
MDA7030-220M	22.0	±20%	2.5	2.0	3.0	2.5	150	190
MDA7030-330M	33.0	±20%	2.1	1.8	2.5	2.0	215	258
MDA7030-470M	47.0	±20%	1.5	1.2	2.0	1.6	318	385

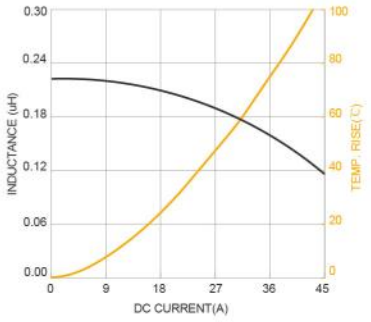
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

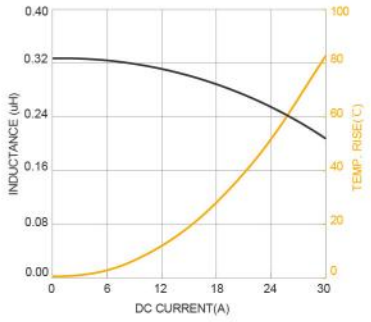
MDA7030-R15N



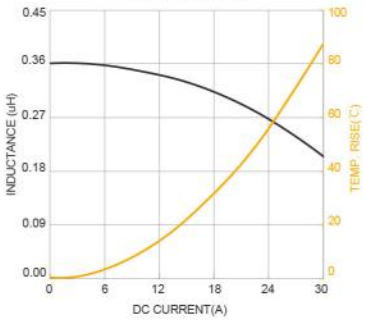
MDA7030-R22M



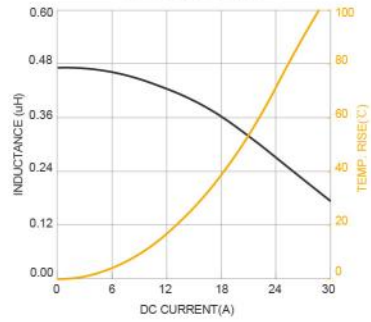
MDA7030-R33M



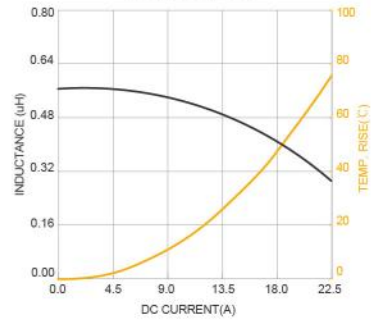
MDA7030-R36M



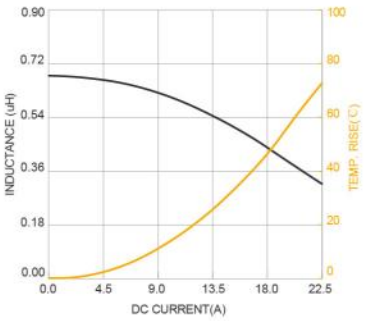
MDA7030-R47M



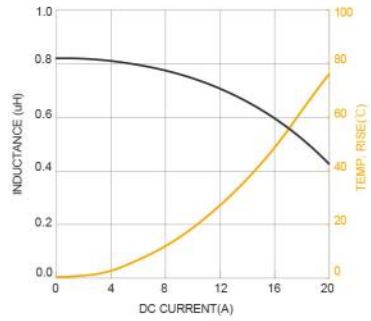
MDA7030-R56M



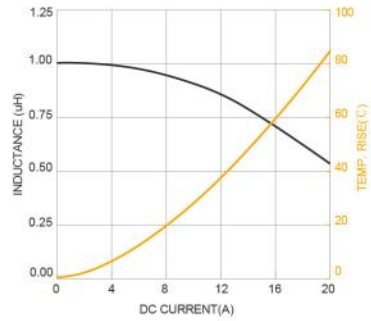
MDA7030-R68M



MDA7030-R82M

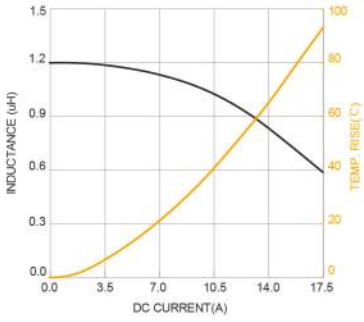


MDA7030-1R0M

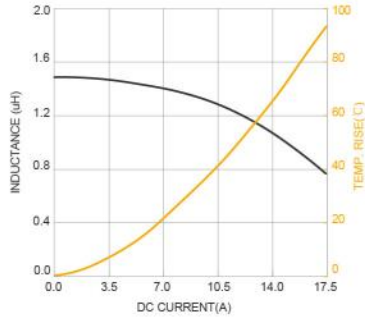


Typical Electrical Characteristics

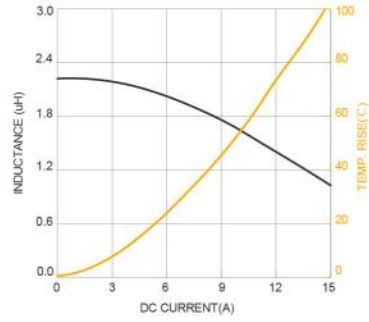
MDA7030-1R2M



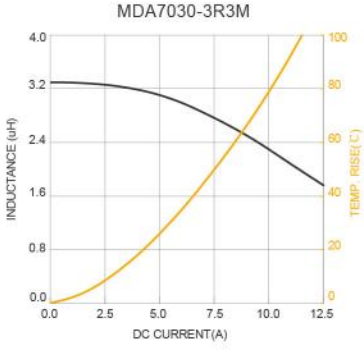
MDA7030-1R5M



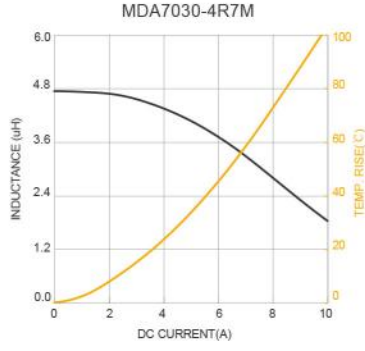
MDA7030-2R2M



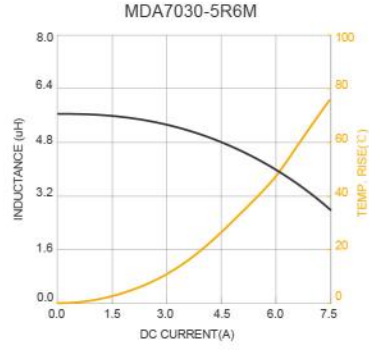
MDA7030-3R3M



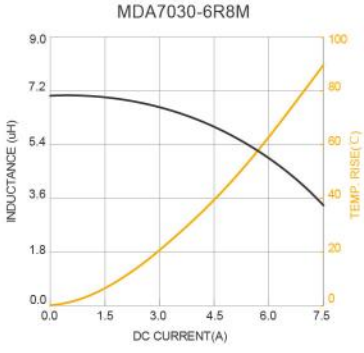
MDA7030-4R7M



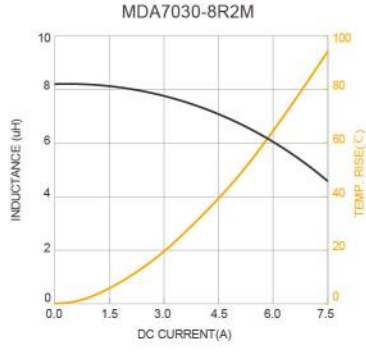
MDA7030-5R6M



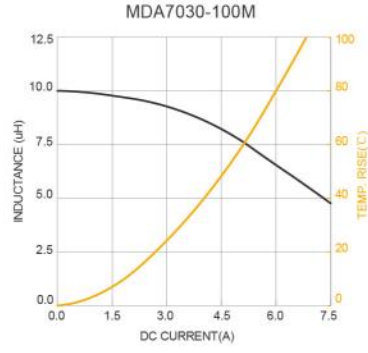
MDA7030-6R8M



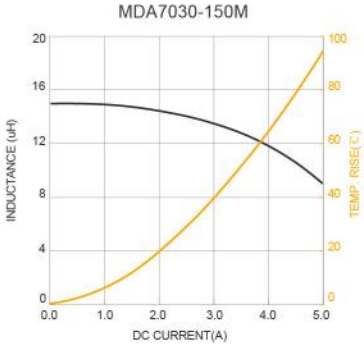
MDA7030-8R2M



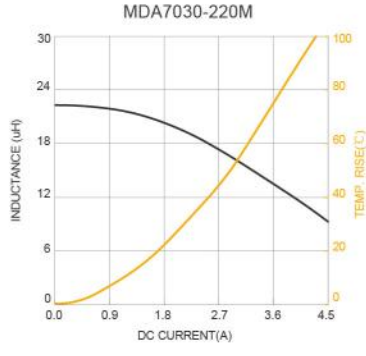
MDA7030-100M



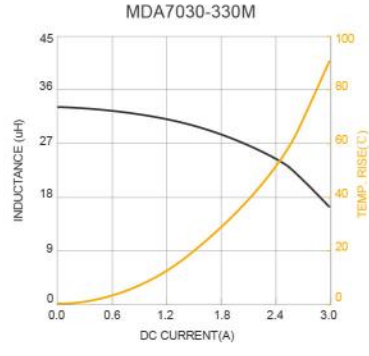
MDA7030-150M

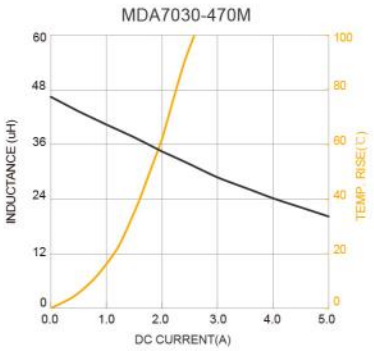


MDA7030-220M



MDA7030-330M



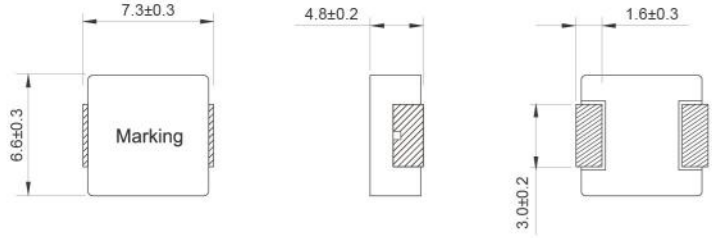

MDA7030-470M
60
48
36
24
12
0
INDUCTANCE (uH)
100
80
60
40
20
0
TEMP. RISE(℃)
0.0
1.0
2.0
3.0
4.0
5.0
DC CURRENT(A)

MDA Series

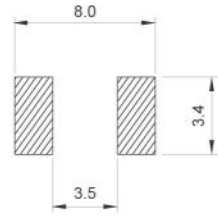
SMD Low Profile High Current Molded Inductor

7050 Size

Dimensions: [mm]



Land Pattern: [mm]



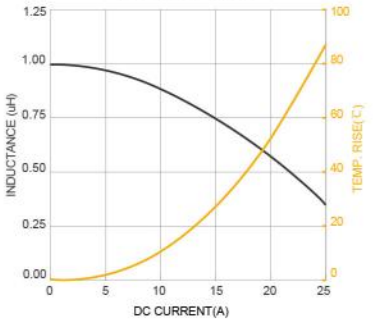
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA7050-1R0M	1.00	±20%	17.0	15.0	16.0	13.0	5.60	6.20
MDA7050-1R5M	1.50	±20%	15.0	13.0	13.0	10.5	6.60	7.30
MDA7050-2R2M	2.20	±20%	14.0	12.0	10.0	8.5	10.0	11.5
MDA7050-3R3M	3.30	±20%	13.0	11.0	9.5	8.0	14.0	16.2
MDA7050-4R7M	4.70	±20%	11.0	9.5	8.8	7.5	20.8	24.0
MDA7050-5R6M	5.60	±20%	10.0	8.5	8.0	7.2	28.0	33.0
MDA7050-6R8M	6.80	±20%	9.0	8.0	7.6	7.0	30.0	36.0
MDA7050-8R2M	8.20	±20%	7.5	6.5	6.5	6.0	38.5	45.0
MDA7050-100M	10.0	±20%	7.0	6.0	6.0	5.7	44.0	53.0
MDA7050-150M	15.0	±20%	5.0	4.0	4.0	3.2	73.0	85.0
MDA7050-220M	22.0	±20%	4.2	3.6	3.6	3.1	122	142
MDA7050-330M	33.0	±20%	3.0	2.5	2.3	1.8	142	170
MDA7050-470M	47.0	±20%	2.6	2.0	1.8	1.5	275	320

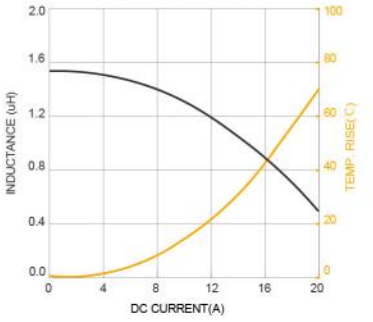
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

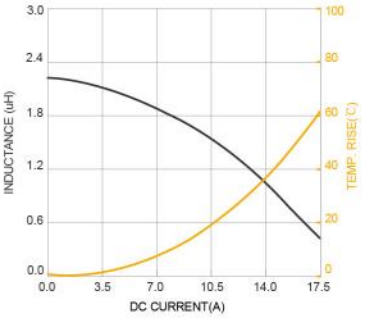
MDA7050-1R0M



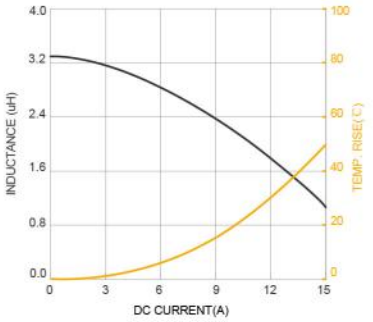
MDA7050-1R5M



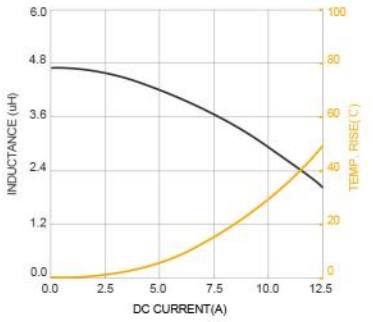
MDA7050-2R2M



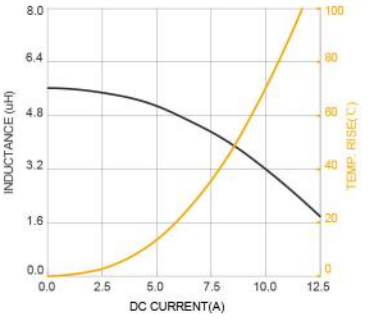
MDA7050-3R3M



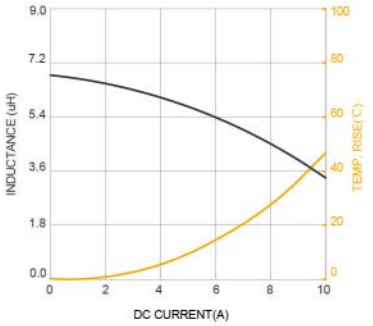
MDA7050-4R7M



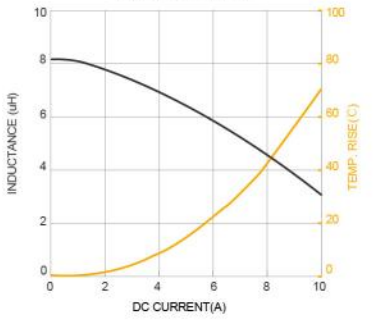
MDA7050-5R6M



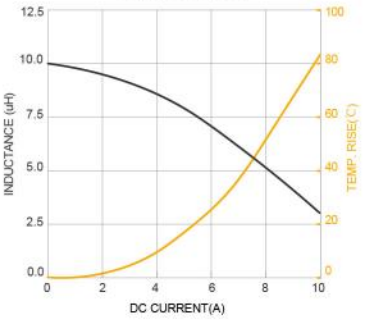
MDA7050-6R8M



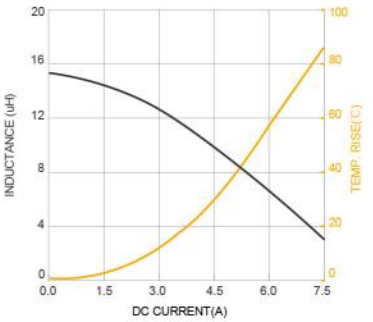
MDA7050-8R2M



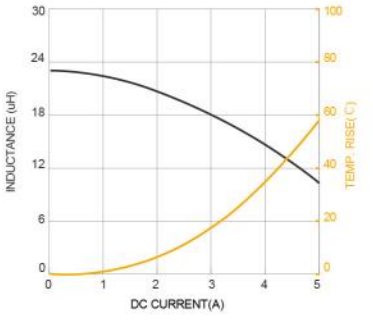
MDA7050-100M



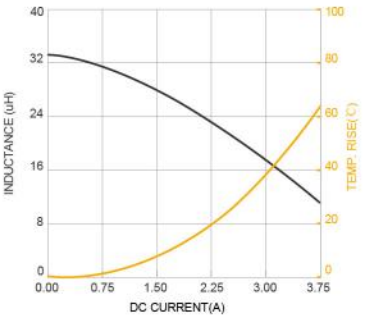
MDA7050-150M



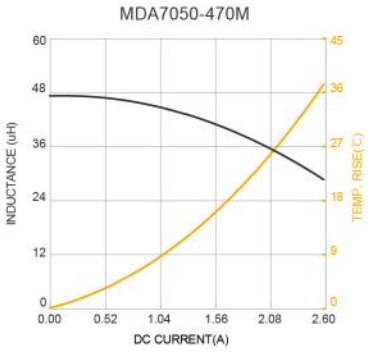
MDA7050-220M



MDA7050-330M



Typical Electrical Characteristics

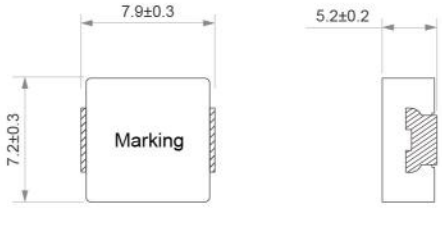


MDA HT Series

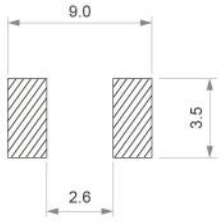
SMD Low Profile High Current Molded Inductor

7054 Size

Dimensions: [mm]



Land Pattern: [mm]



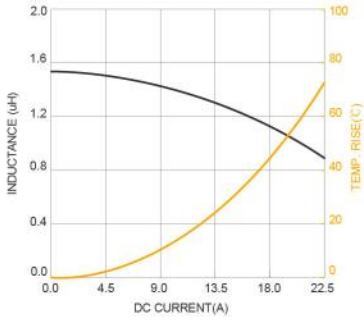
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA7054HT-1R5M	1.50	±20%	11.5	10.3	16.4	14.0	6.30	7.30
MDA7054HT-2R2M	2.20	±20%	9.80	8.70	15.0	12.7	9.90	11.4
MDA7054HT-3R3M	3.30	±20%	8.00	7.20	13.5	11.6	13.4	15.4
MDA7054HT-4R7M	4.70	±20%	7.00	6.30	13.2	11.2	18.2	20.9
MDA7054HT-5R6M	5.60	±20%	6.50	5.60	10.6	9.20	20.0	24.0
MDA7054HT-6R8M	6.80	±20%	6.20	5.50	10.2	8.70	23.1	26.6
MDA7054HT-8R2M	8.20	±20%	5.80	5.00	9.20	7.70	27.8	31.9
MDA7054HT-100M	10.0	±20%	5.20	4.70	8.10	6.90	33.0	38.0
MDA7054HT-150M	15.0	±20%	3.80	3.40	7.00	5.90	60.0	66.0
MDA7054HT-220M	22.0	±20%	3.30	3.00	6.30	5.40	85.0	93.5
MDA7054HT-330M	33.0	±20%	3.20	2.80	4.90	4.20	111.0	127.6
MDA7054HT-470M	47.0	±20%	2.50	2.20	4.20	3.50	156.0	171.6
MDA7054HT-560M	56.0	±20%	2.20	2.00	3.30	2.80	190.5	209.3
MDA7054HT-680M	68.0	±20%	2.00	1.80	2.80	2.40	222.0	255.0
MDA7054HT-101M	100	±20%	1.80	1.60	2.40	2.00	303.0	348.0

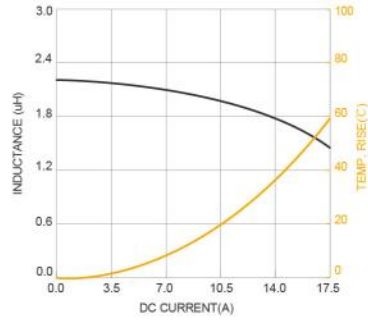
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T≈40°C

Typical Electrical Characteristics

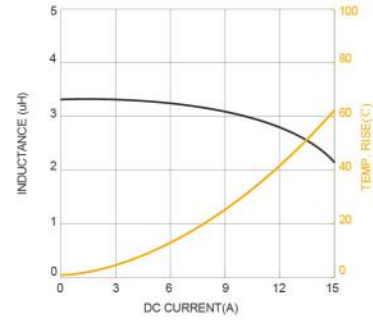
MDA7054HT-1R5M



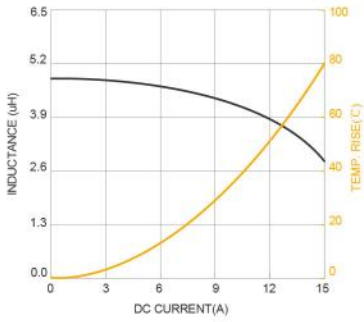
MDA7054HT-2R2M



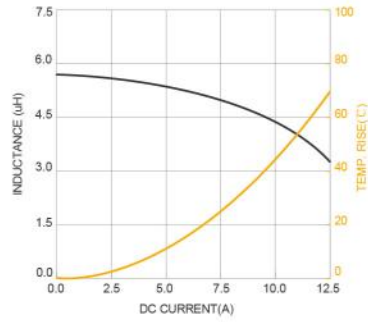
MDA7054HT-3R3M



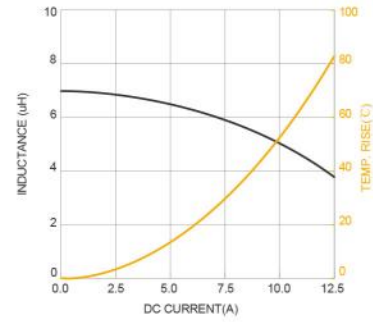
MDA7054HT-4R7M



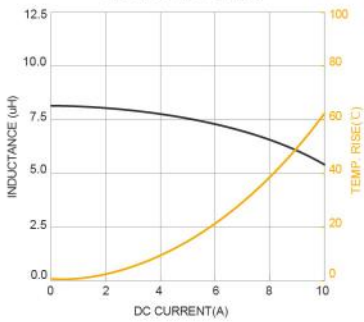
MDA7054HT-5R6M



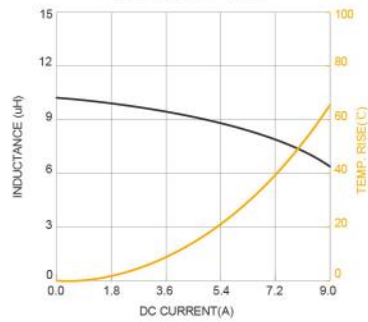
MDA7054HT-6R8M



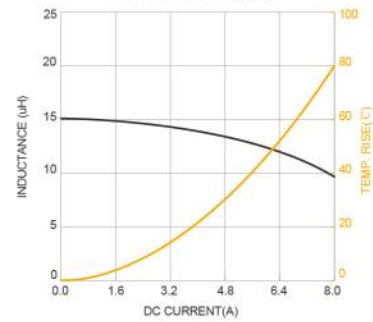
MDA7054HT-8R2M



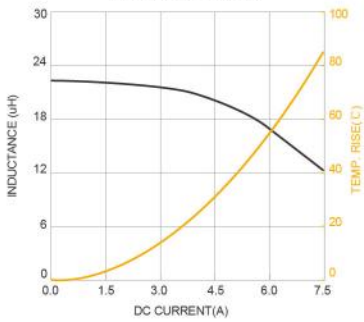
MDA7054HT-100M



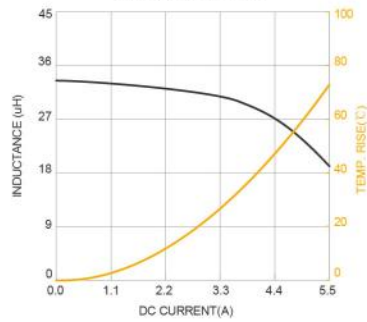
MDA7054HT-150M



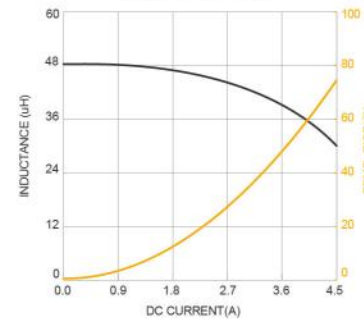
MDA7054HT-220M



MDA7054HT-330M

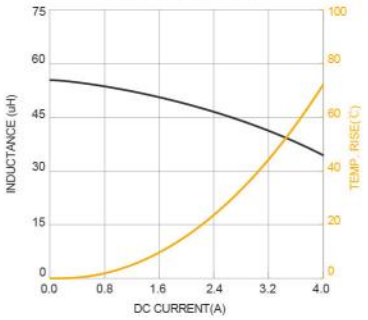


MDA7054HT-470M

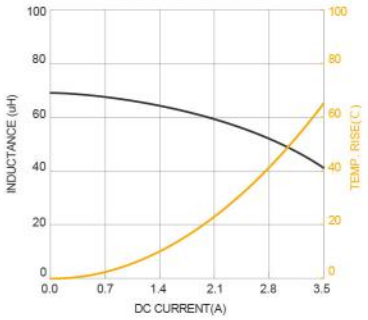


Typical Electrical Characteristics

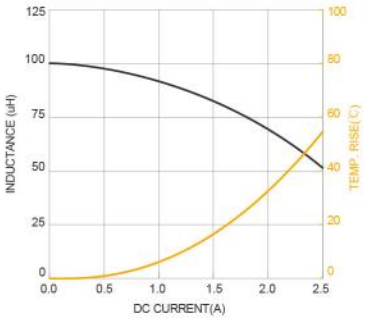
MDA7054HT-560M



MDA7054HT-680M



MDA7054HT-101M

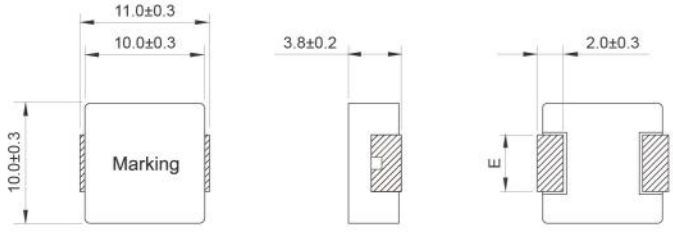


MDA Series

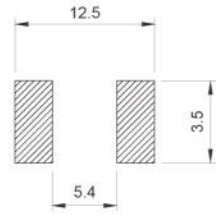
SMD Low Profile High Current Molded Inductor

1040 Size

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties

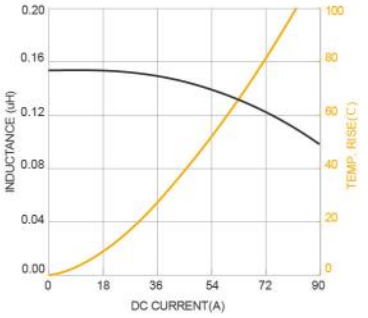
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1040-R15N	0.15	±30%	44.0	38.0	82.0	75.0	0.50	0.60	3.0±0.3
MDA1040-R22M	0.22	±20%	36.0	33.0	70.0	60.0	0.72	0.83	3.0±0.3
MDA1040-R36M	0.36	±20%	33.0	29.0	51.0	45.0	1.05	1.18	3.0±0.3
MDA1040-R47M	0.47	±20%	32.0	28.0	46.0	40.0	1.30	1.50	3.0±0.3
MDA1040-R56M	0.56	±20%	25.0	23.0	34.0	29.0	1.60	1.80	2.5±0.3
MDA1040-R68M	0.68	±20%	23.0	20.0	31.0	28.0	1.90	2.20	2.5±0.3
MDA1040-1R0M	1.00	±20%	20.0	18.0	29.0	26.0	2.90	3.25	2.5±0.3
MDA1040-1R5M	1.50	±20%	17.5	16.0	26.0	22.0	3.70	4.20	2.5±0.3
MDA1040-2R2M	2.20	±20%	15.0	13.0	20.0	16.0	5.80	6.70	3.0±0.3
MDA1040-3R3M	3.30	±20%	11.0	10.0	17.5	14.0	10.5	11.8	3.0±0.3
MDA1040-4R7M	4.70	±20%	8.80	8.0	15.2	13.0	15.8	19.0	3.0±0.3
MDA1040-5R6M	5.60	±20%	8.00	7.2	14.1	11.5	19.0	22.8	3.0±0.3
MDA1040-6R8M	6.80	±20%	7.80	6.8	12.2	11.0	22.0	24.5	3.0±0.3
MDA1040-8R2M	8.20	±20%	7.60	6.5	9.50	8.5	25.0	28.0	3.0±0.3
MDA1040-100M	10.0	±20%	7.50	6.1	8.60	7.5	27.0	30.0	3.0±0.3

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1040-150M	15.0	±20%	6.25	5.0	7.00	6.0	41.0	45.0	3.0±0.3
MDA1040-220M	22.0	±20%	5.00	4.1	6.20	5.5	58.0	66.0	3.0±0.3
MDA1040-330M	33.0	±20%	4.40	3.5	5.50	5.0	84.0	91.0	3.0±0.3
MDA1040-470M	47.0	±20%	3.50	3.0	4.00	3.7	125	143	3.0±0.3
MDA1040-680M	68.0	±20%	2.60	2.4	3.20	3.0	192	210	3.0±0.3

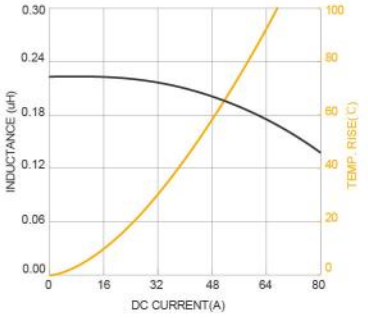
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

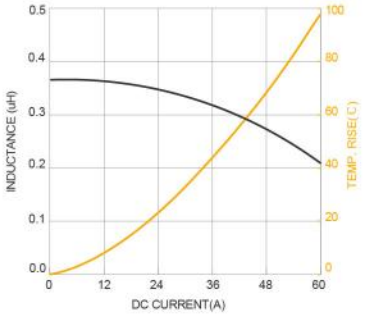
MDA1040-R15N



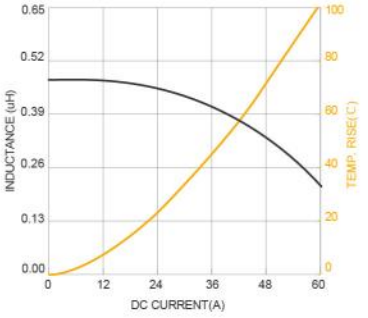
MDA1040-R22M



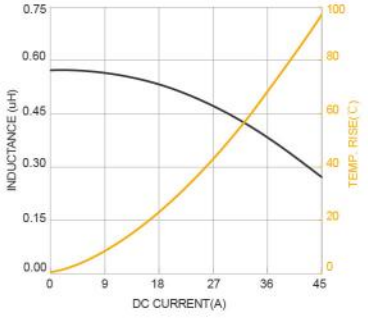
MDA1040-R36M



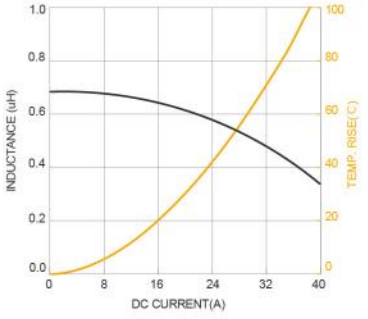
MDA1040-R47M



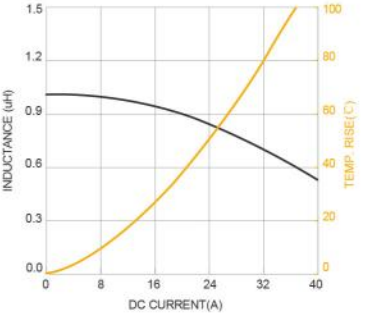
MDA1040-R56M



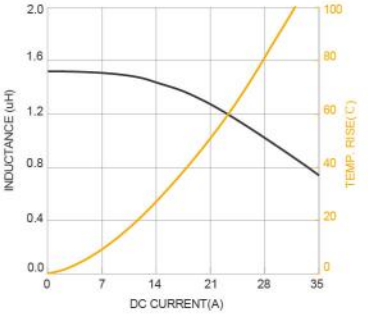
MDA1040-R68M



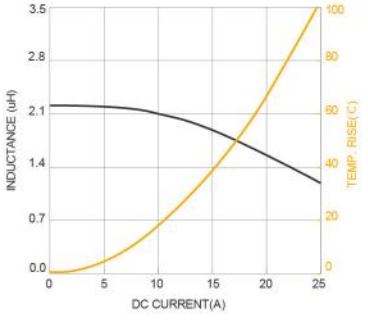
MDA1040-1R0M



MDA1040-1R5M

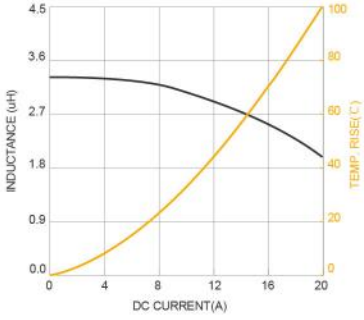


MDA1040-2R2M

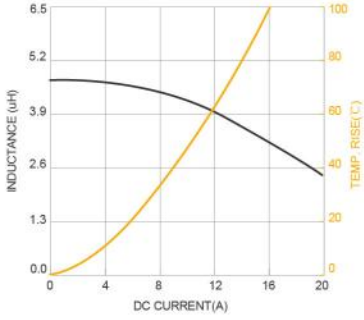


Typical Electrical Characteristics

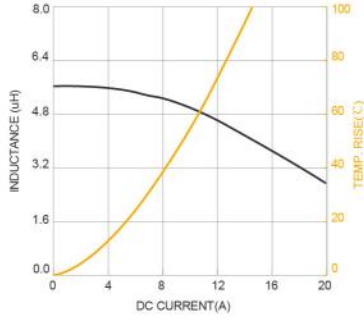
MDA1040-3R3M



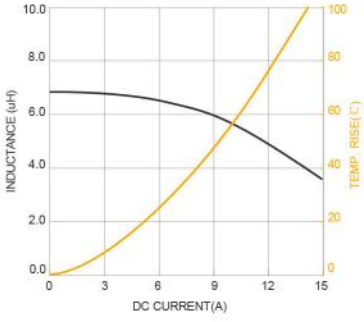
MDA1040-4R7M



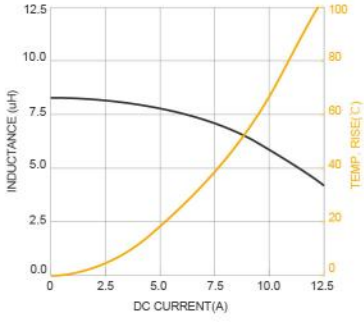
MDA1040-5R6M



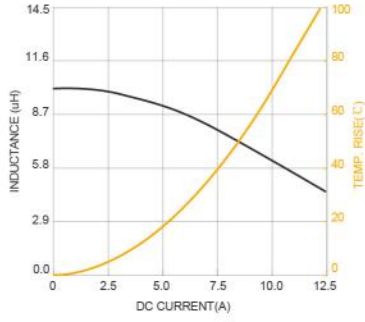
MDA1040-6R8M



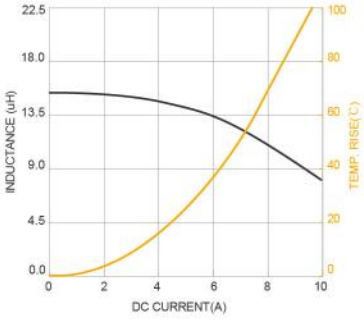
MDA1040-8R2M



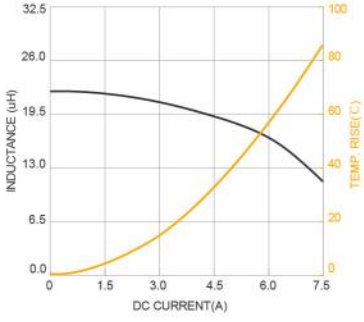
MDA1040-100M



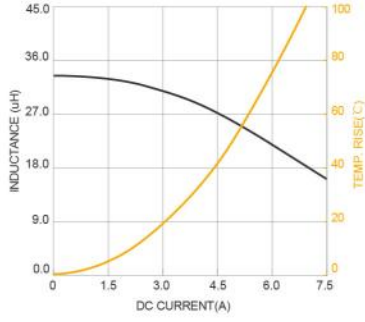
MDA1040-150M



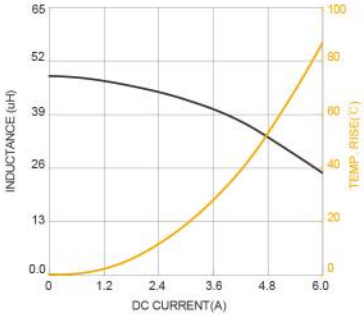
MDA1040-220M



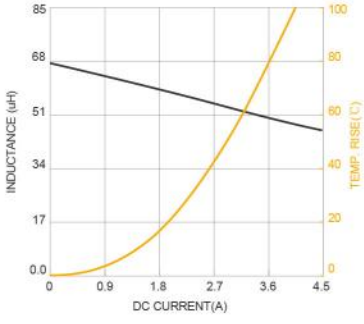
MDA1040-330M



MDA1040-470M



MDA1040-680M

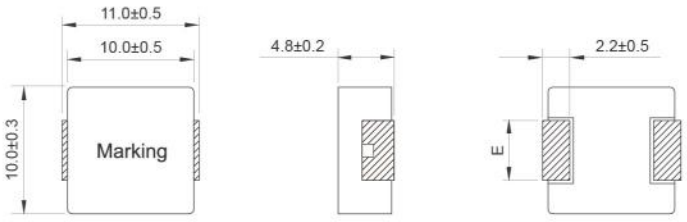


MDA Series

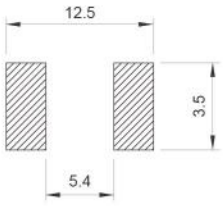
SMD Low Profile High Current Molded Inductor

1050 Size

Dimensions: [mm]



Land Pattern: [mm]



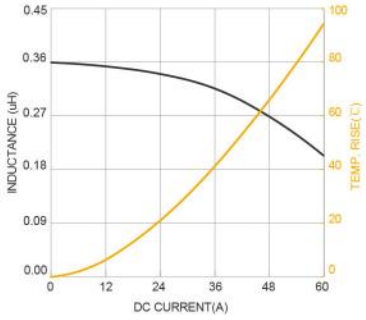
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1050-R36M	0.36	±20%	34.0	30.0	52.0	46.0	0.82	0.92	3.0±0.3
MDA1050-R47M	0.47	±20%	33.0	29.0	46.0	40.0	1.15	1.32	3.0±0.3
MDA1050-R68M	0.68	±20%	28.0	25.0	35.0	32.0	1.60	1.90	2.5±0.3
MDA1050-1R0M	1.00	±20%	25.0	23.0	33.0	30.0	2.60	3.00	2.5±0.3
MDA1050-1R5M	1.50	±20%	23.0	21.0	27.0	24.0	3.40	3.80	2.5±0.3
MDA1050-2R2M	2.20	±20%	19.5	17.5	20.0	18.0	5.10	5.60	3.0±0.3
MDA1050-3R3M	3.30	±20%	17.0	15.0	17.5	15.5	8.10	9.10	3.0±0.3
MDA1050-4R7M	4.70	±20%	15.0	13.0	16.0	14.0	9.30	10.5	3.0±0.3
MDA1050-5R6M	5.60	±20%	13.0	11.0	15.0	12.5	12.8	14.4	3.0±0.3
MDA1050-6R8M	6.80	±20%	12.0	10.0	14.0	12.0	15.0	17.3	3.0±0.3
MDA1050-8R2M	8.20	±20%	10.0	8.5	13.5	11.5	16.1	18.8	3.0±0.3
MDA1050-100M	10.0	±20%	7.6	7.2	13.0	11.0	18.9	21.8	3.0±0.3
MDA1050-150M	15.0	±20%	6.5	6.0	8.5	7.5	32.0	39.0	3.0±0.3
MDA1050-220M	22.0	±20%	6.0	5.5	6.0	5.5	44.0	54.0	3.0±0.3
MDA1050-330M	33.0	±20%	5.5	5.0	5.8	5.2	74.0	86.0	3.0±0.3
MDA1050-470M	47.0	±20%	4.5	4.0	4.0	3.5	106	127	3.0±0.3

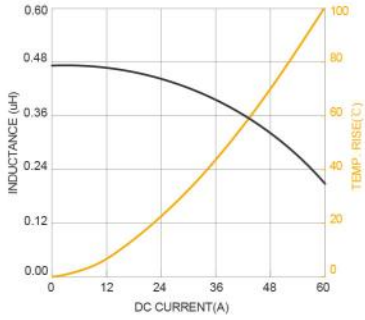
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

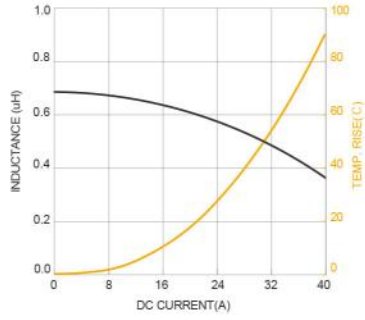
MDA1050-R36M



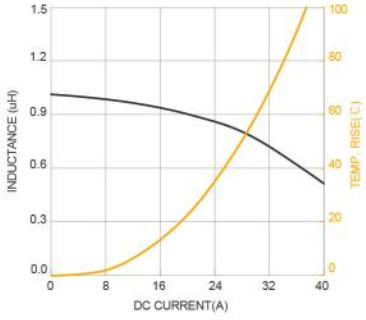
MDA1050-R47M



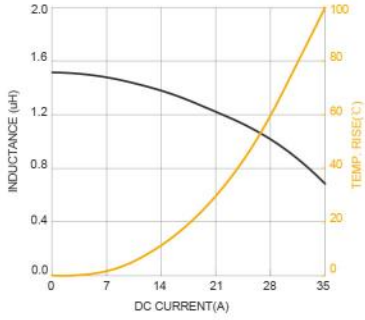
MDA1050-R68M



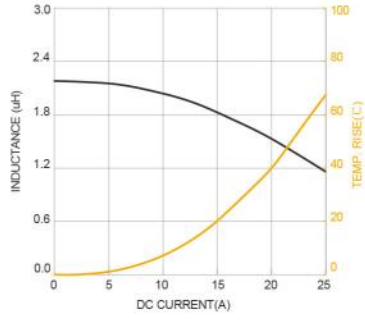
MDA1050-1R0M



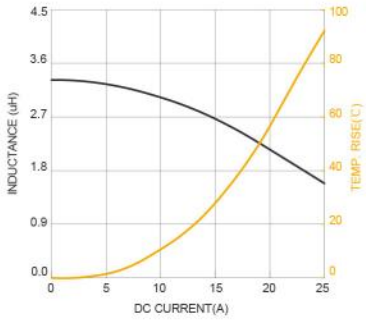
MDA1050-1R5M



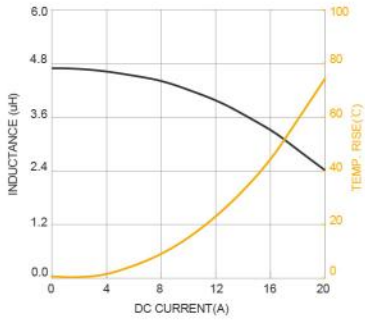
MDA1050-2R2M



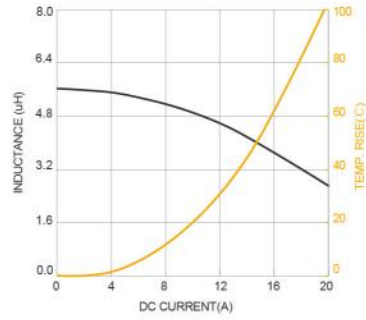
MDA1050-3R3M



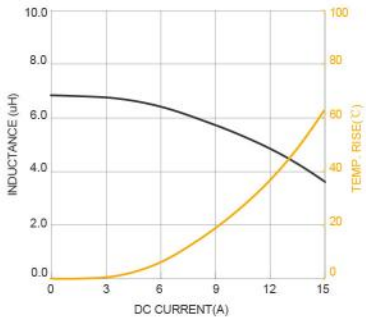
MDA1050-4R7M



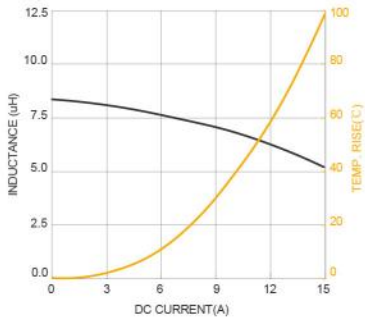
MDA1050-5R6M



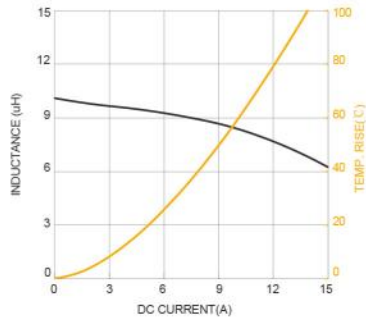
MDA1050-6R8M



MDA1050-8R2M

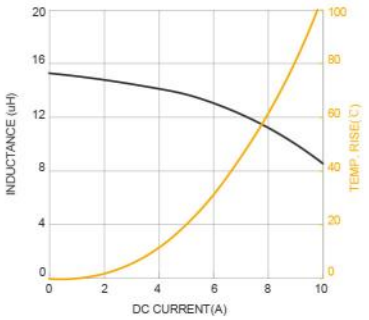


MDA1050-100M

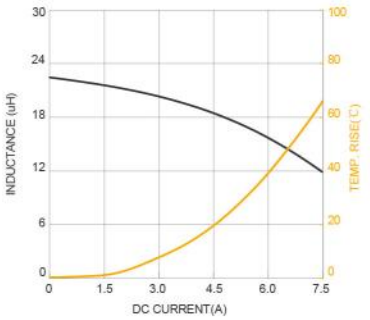


Typical Electrical Characteristics

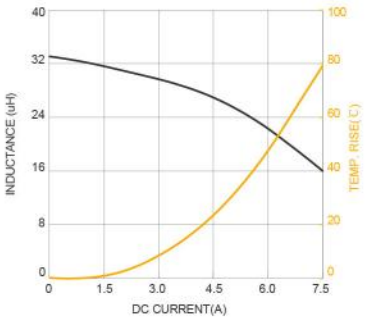
MDA1050-150M



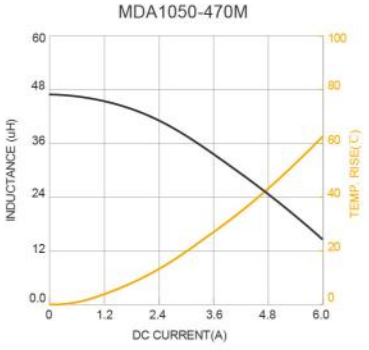
MDA1050-220M



MDA1050-330M



MDA1050-470M

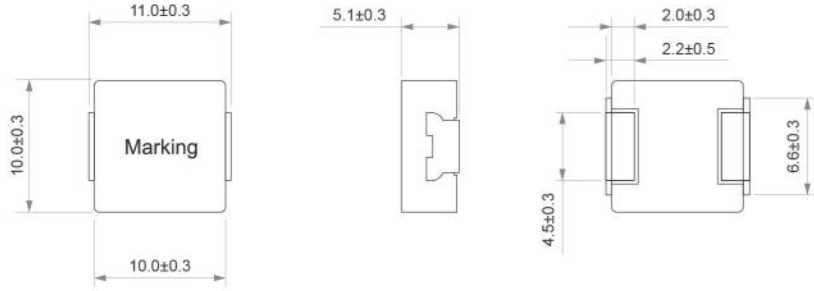


MDA HT Series

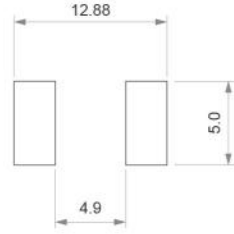
SMD Low Profile High Current Molded Inductor

1054 Size

Dimensions: [mm]



Land Pattern: [mm]



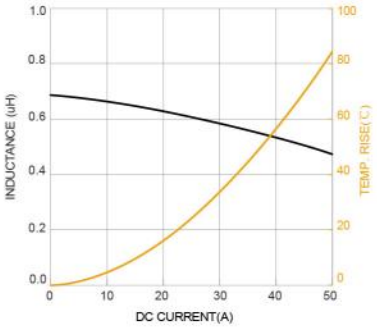
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA1054HT-R68M	0.68	±20%	32.0	28.8	46.0	39.4	1.80	2.22
MDA1054HT-1R0M	1.00	±20%	30.0	27.0	37.0	31.7	2.30	2.76
MDA1054HT-1R5M	1.50	±20%	25.0	22.3	27.0	23.0	3.60	4.20
MDA1054HT-2R2M	2.20	±20%	23.0	20.7	25.0	21.4	4.10	4.90
MDA1054HT-3R3M	3.30	±20%	18.7	16.8	19.0	16.3	6.20	7.40
MDA1054HT-4R7M	4.70	±20%	14.5	13.0	15.7	13.5	9.00	10.0
MDA1054HT-6R8M	6.80	±20%	12.3	10.8	13.3	11.4	12.4	14.0
MDA1054HT-100M	10.0	±20%	9.00	7.80	12.8	10.9	22.0	24.2
MDA1054HT-150M	15.0	±20%	7.60	6.80	9.20	7.90	27.3	31.3
MDA1054HT-220M	22.0	±20%	6.00	5.40	8.80	7.50	43.5	50.0
MDA1054HT-330M	33.0	±20%	4.80	4.30	7.60	6.50	66.0	75.3
MDA1054HT-470M	47.0	±20%	4.20	3.60	4.90	4.20	89.0	103

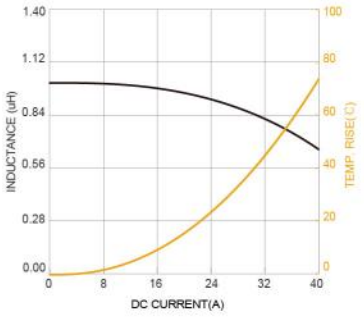
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

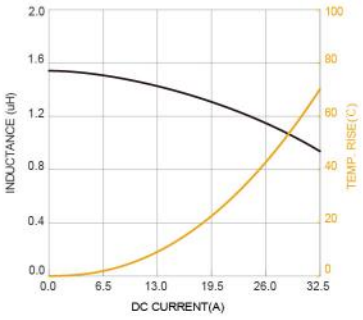
MDA1054HT-R68M



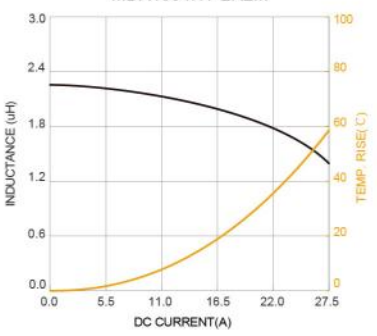
MDA1054HT-1R0M



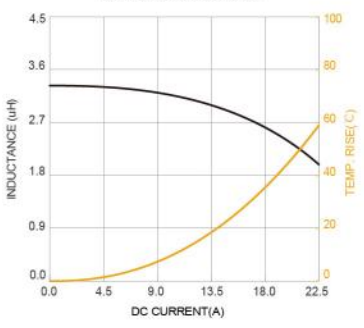
MDA1054HT-1R5M



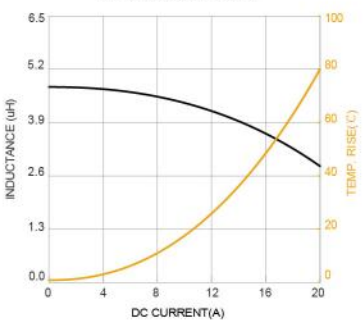
MDA1054HT-2R2M



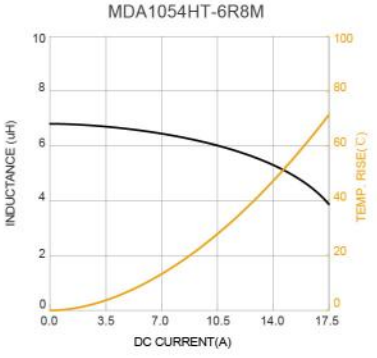
MDA1054HT-3R3M



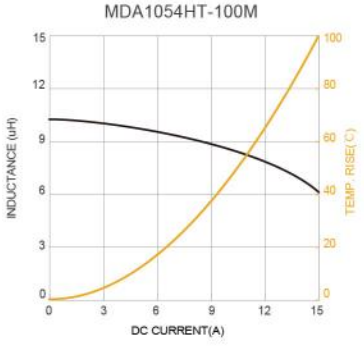
MDA1054HT-4R7M



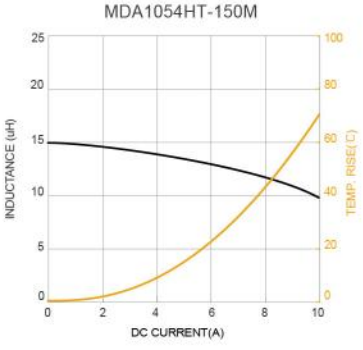
MDA1054HT-6R8M



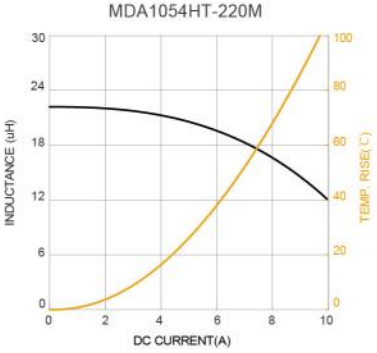
MDA1054HT-100M



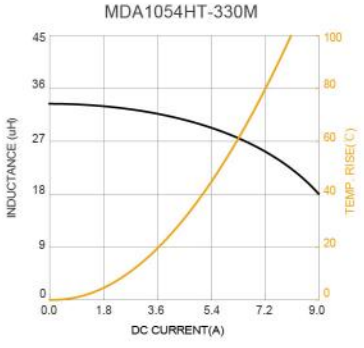
MDA1054HT-150M



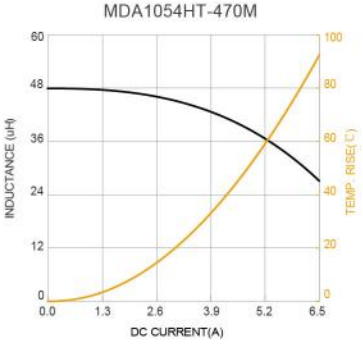
MDA1054HT-220M



MDA1054HT-330M



MDA1054HT-470M

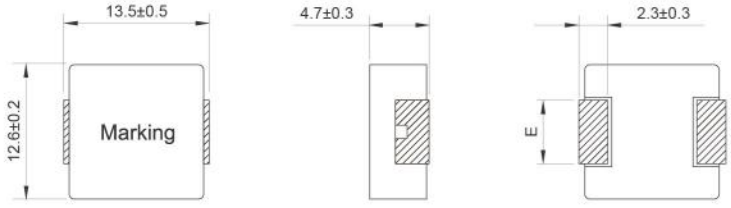


MDA Series

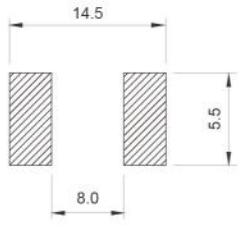
SMD Low Profile High Current Molded Inductor

1350 Size

Dimensions: [mm]



Land Pattern: [mm]



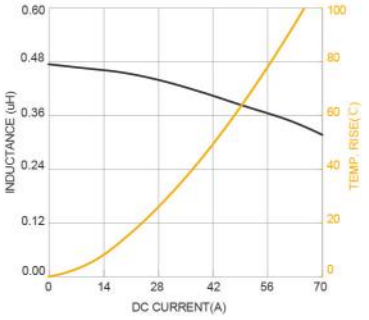
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1350-R47M	0.47	±20%	38.0	34.0	65.0	58.0	0.77	0.90	4.0±0.3
MDA1350-R68M	0.68	±20%	34.0	31.0	50.0	42.0	1.30	1.55	4.0±0.3
MDA1350-1R0M	1.00	±20%	30.0	27.0	40.0	34.0	1.60	1.90	4.0±0.3
MDA1350-1R5M	1.50	±20%	25.0	22.0	31.0	28.0	3.20	3.80	4.7±0.3
MDA1350-2R2M	2.20	±20%	17.0	15.5	26.0	23.0	4.10	4.80	4.7±0.3
MDA1350-3R3M	3.30	±20%	15.5	14.0	23.0	20.5	6.00	7.00	4.7±0.3
MDA1350-4R7M	4.70	±20%	14.0	12.5	18.5	16.0	8.80	10.2	4.7±0.3
MDA1350-6R8M	6.80	±20%	12.0	11.0	16.5	15.0	13.0	16.0	4.7±0.3
MDA1350-100M	10.0	±20%	10.0	9.0	13.0	10.5	19.2	20.9	4.7±0.3
MDA1350-150M	15.0	±20%	9.40	8.2	11.0	9.2	30.0	36.0	4.7±0.3
MDA1350-220M	22.0	±20%	8.00	7.0	8.50	7.5	42.0	52.0	4.7±0.3
MDA1350-330M	33.0	±20%	6.00	5.2	7.30	6.5	66.0	80.0	4.7±0.3
MDA1350-470M	47.0	±20%	5.20	4.3	6.00	5.2	78.0	94.0	4.7±0.3
MDA1350-680M	68.0	±20%	4.30	3.4	5.00	4.0	95.0	132.0	4.7±0.3

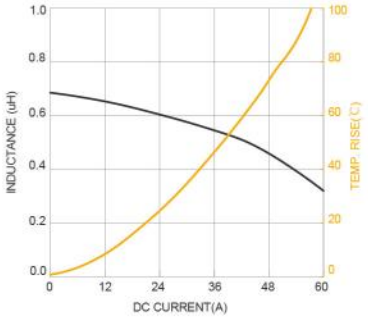
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

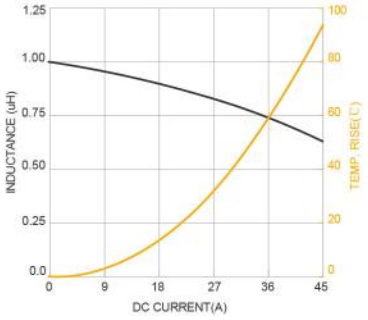
MDA1350-R47M



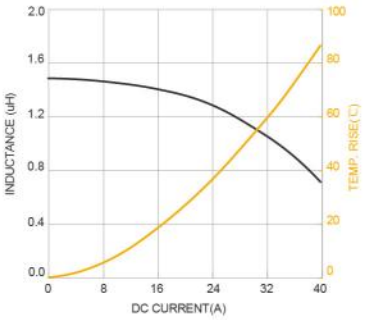
MDA1350-R68M



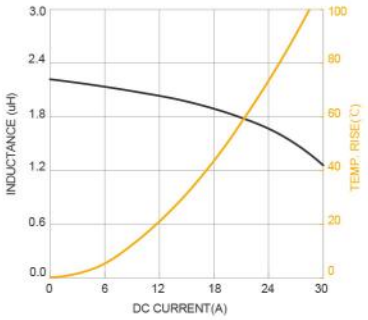
MDA1350-1R0M



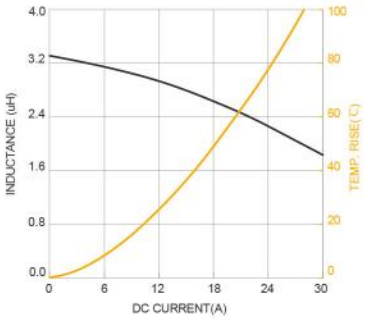
MDA1350-1R5M



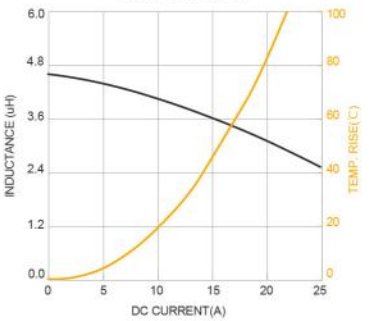
MDA1350-2R2M



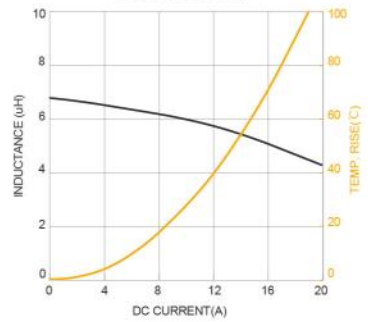
MDA1350-3R3M



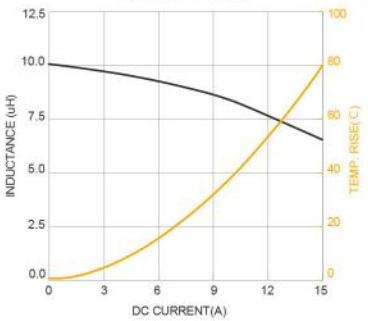
MDA1350-4R7M



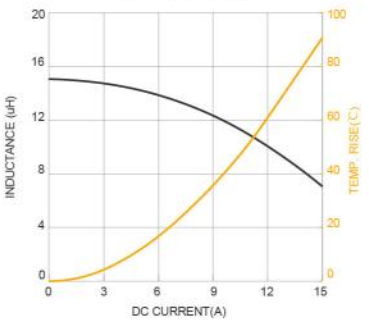
MDA1350-6R8M



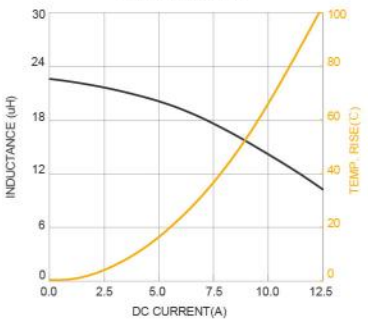
MDA1350-100M



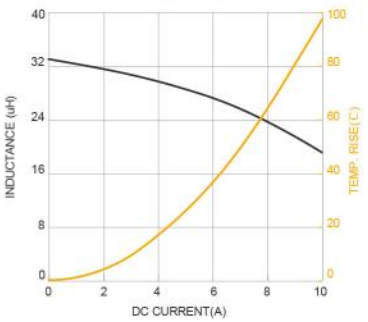
MDA1350-150M



MDA1350-220M

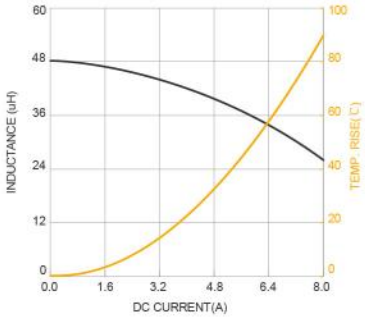


MDA1350-330M

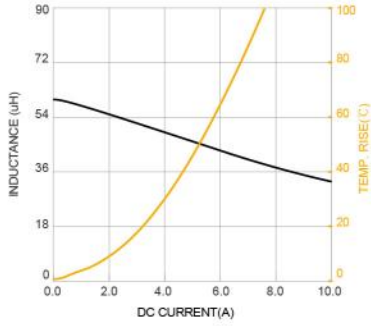


Typical Electrical Characteristics

MDA1350-470M



MDA1350-680M

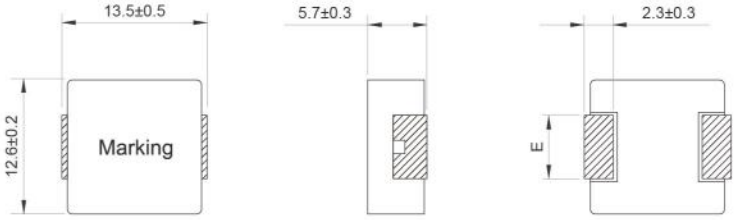


MDA Series

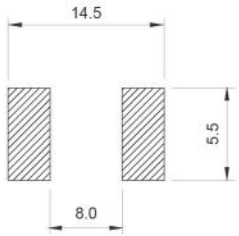
SMD Low Profile High Current Molded Inductor

1360 Size

Dimensions: [mm]



Land Pattern: [mm]



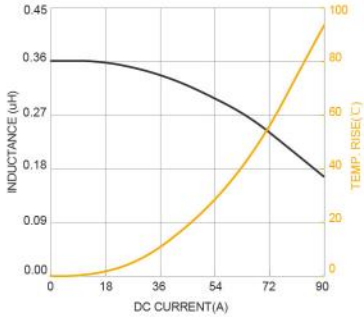
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1360-R36M	0.36	±20%	60.0	50.0	70.0	60.0	0.65	0.80	4.7±0.3
MDA1360-1R5M	1.50	±20%	28.0	24.0	32.0	27.0	2.40	3.00	4.0±0.3
MDA1360-2R2M	2.20	±20%	25.0	21.0	28.0	24.0	3.70	4.30	4.7±0.3
MDA1360-3R3M	3.30	±20%	21.0	18.0	28.0	24.0	5.30	6.50	4.7±0.3
MDA1360-4R7M	4.70	±20%	19.0	16.0	23.0	19.5	7.00	8.40	4.7±0.3
MDA1360-8R2M	8.20	±20%	13.5	12.0	17.0	15.5	13.5	16.0	4.7±0.3
MDA1360-100M	10.0	±20%	12.0	10.5	16.0	14.5	15.5	18.6	4.7±0.3
MDA1360-150M	15.0	±20%	10.0	8.5	10.0	9.0	24.0	29.0	4.7±0.3
MDA1360-220M	22.0	±20%	8.0	7.0	9.0	8.0	31.2	37.5	4.7±0.3
MDA1360-330M	33.0	±20%	6.5	5.5	7.8	6.7	56.0	68.0	4.7±0.3
MDA1360-470M	47.0	±20%	5.2	4.5	6.7	5.5	76.0	88.0	4.7±0.3

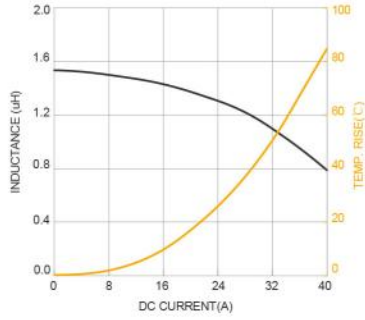
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

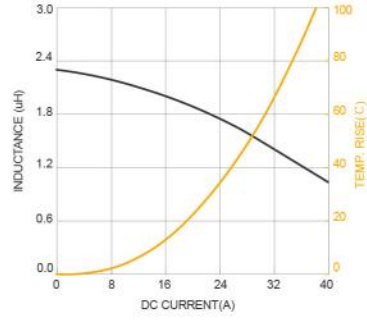
MDA1360-R36M



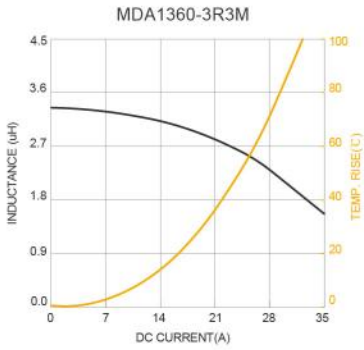
MDA1360-1R5M



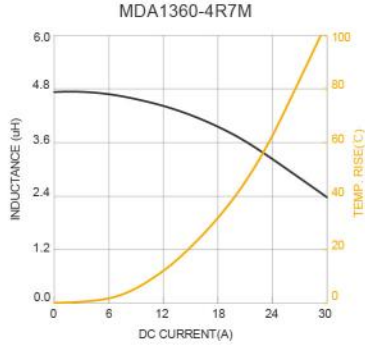
MDA1360-2R2M



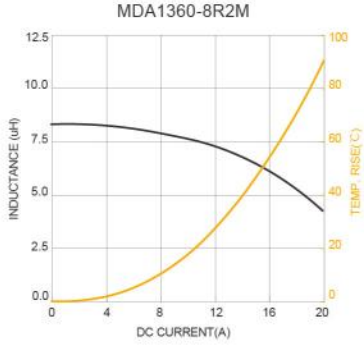
MDA1360-3R3M



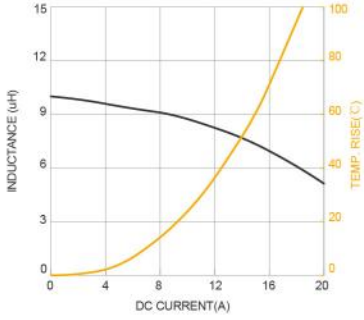
MDA1360-4R7M



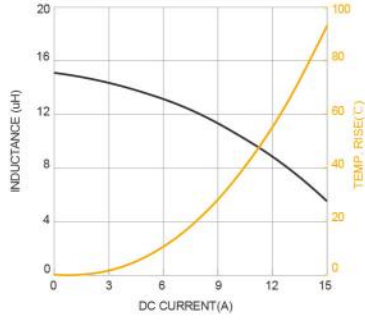
MDA1360-8R2M



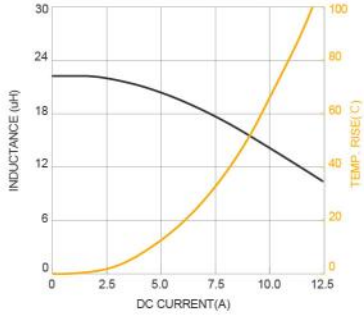
MDA1360-100M



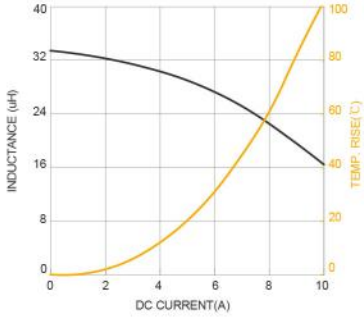
MDA1360-150M



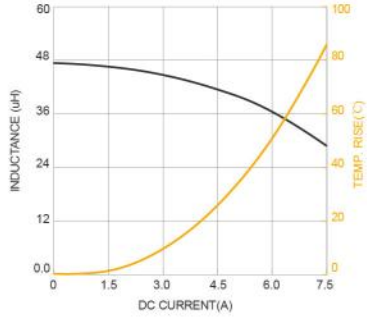
MDA1360-220M



MDA1360-330M



MDA1360-470M

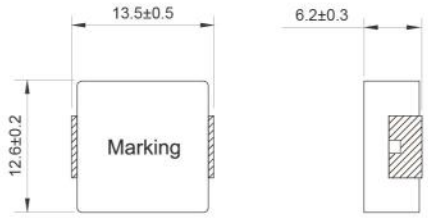


MDA Series

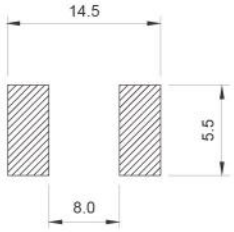
SMD Low Profile High Current Molded Inductor

1365 Size

Dimensions: [mm]



Land Pattern: [mm]



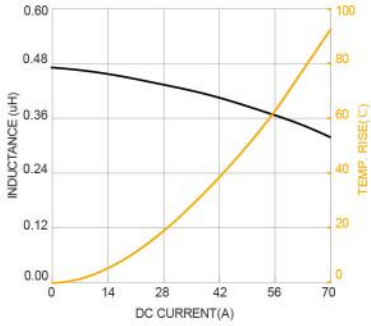
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)	E
MDA1365-R47M	0.47	±20%	42.0	35.0	68.0	58.0	0.88	1.02	4.7±0.3
MDA1365-R68M	0.68	±20%	36.5	33.0	55.0	46.0	1.25	1.50	4.0±0.3
MDA1365-1R0M	1.00	±20%	33.0	29.0	45.0	36.0	1.50	1.80	4.0±0.3
MDA1365-1R5M	1.50	±20%	29.0	25.0	35.0	30.0	2.20	2.60	4.0±0.3
MDA1365-2R2M	2.20	±20%	25.0	21.0	28.5	24.0	3.70	4.20	4.7±0.3
MDA1365-3R3M	3.30	±20%	22.0	19.0	27.0	22.5	5.30	6.20	4.7±0.3
MDA1365-4R7M	4.70	±20%	20.0	17.0	25.0	21.0	6.80	8.00	4.7±0.3
MDA1365-5R6M	5.60	±20%	18.0	15.0	23.0	19.5	8.30	9.80	4.7±0.3
MDA1365-6R8M	6.80	±20%	16.5	14.0	21.0	18.0	9.80	11.3	4.7±0.3
MDA1365-8R2M	8.20	±20%	15.0	12.5	19.0	17.0	12.0	13.8	4.7±0.3
MDA1365-100M	10.0	±20%	13.0	11.0	17.0	15.0	13.0	15.8	4.7±0.3
MDA1365-150M	15.0	±20%	11.0	9.5	13.5	12.0	22.0	26.0	4.7±0.3
MDA1365-220M	22.0	±20%	10.0	8.0	10.0	9.0	31.0	35.0	4.7±0.3
MDA1365-330M	33.0	±20%	9.00	6.5	9.00	8.0	46.0	55.0	4.7±0.3
MDA1365-470M	47.0	±20%	8.00	5.7	7.60	6.8	58.0	67.0	4.7±0.3
MDA1365-680M	68.0	±20%	5.80	4.8	6.00	5.0	82.0	100.0	4.7±0.3

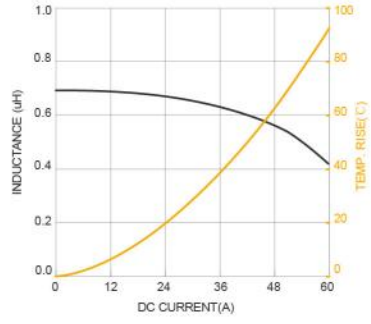
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

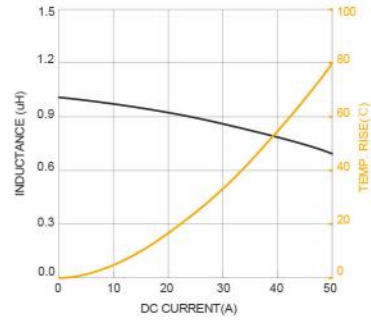
MDA1365-R47M



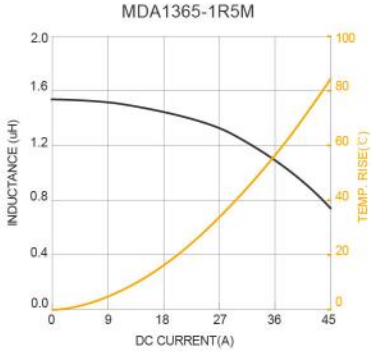
MDA1365-R68M



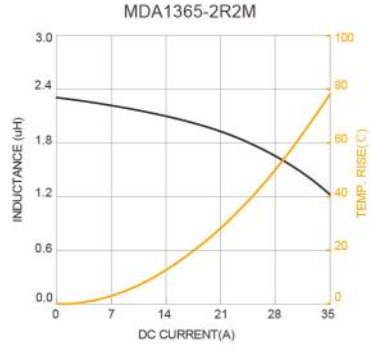
MDA1365-1R0M



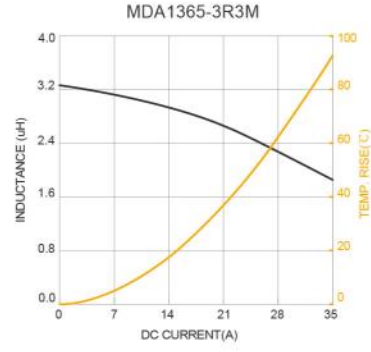
MDA1365-1R5M



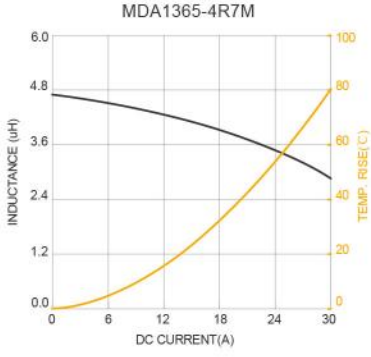
MDA1365-2R2M



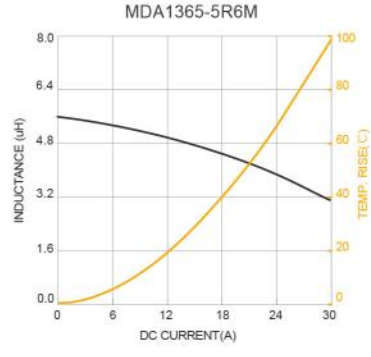
MDA1365-3R3M



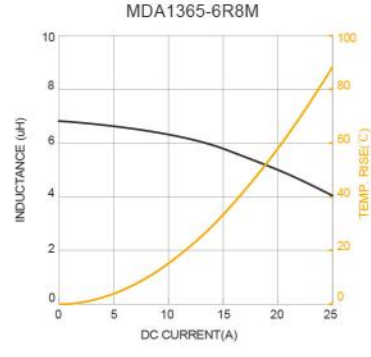
MDA1365-4R7M



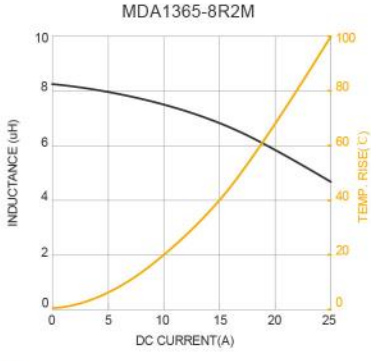
MDA1365-5R6M



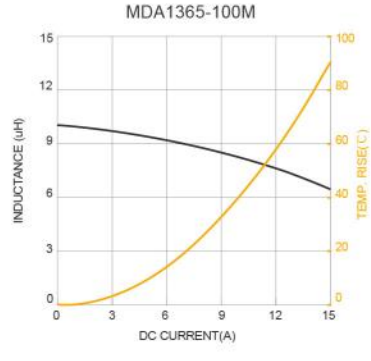
MDA1365-6R8M



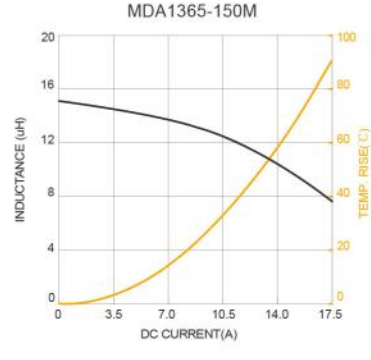
MDA1365-8R2M



MDA1365-100M

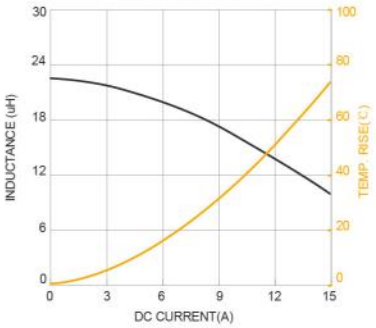


MDA1365-150M

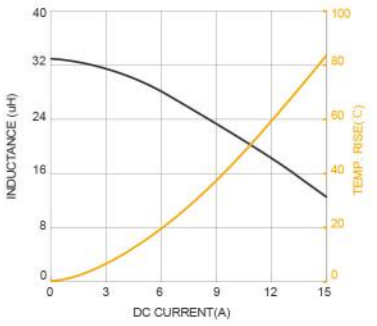


Typical Electrical Characteristics

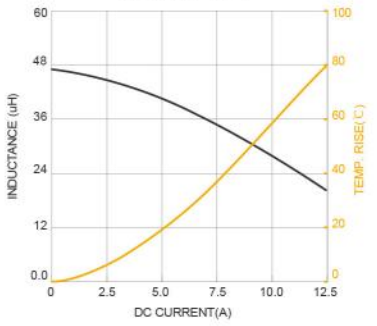
MDA1365-220M



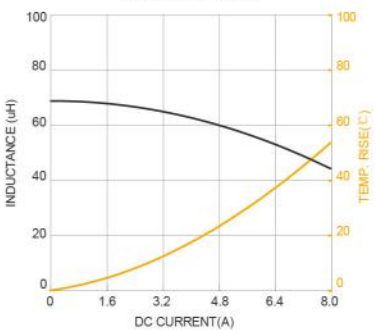
MDA1365-330M



MDA1365-470M



MDA1365-680M

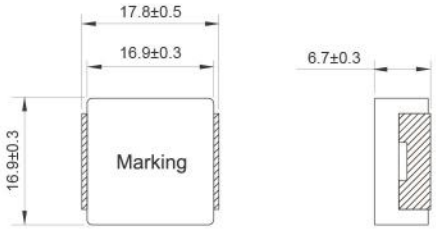


MDA Series

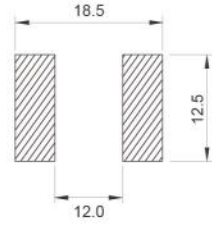
SMD Low Profile High Current Molded Inductor

1870 Size

Dimensions: [mm]



Land Pattern: [mm]



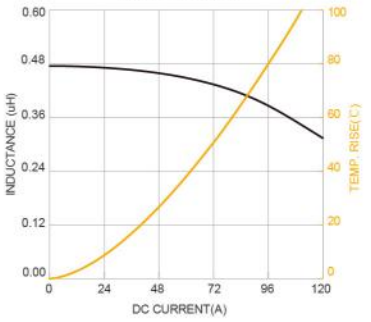
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA1870-R47M	0.47	±20%	60.0	55.0	110	100	0.70	0.90
MDA1870-R56M	0.56	±20%	56.0	50.0	80.0	70.0	0.81	0.97
MDA1870-1R0M	1.00	±20%	46.0	42.0	50.0	45.0	1.06	1.30
MDA1870-1R5M	1.50	±20%	39.0	35.0	46.0	40.0	1.50	1.80
MDA1870-2R2M	2.20	±20%	32.0	30.0	35.0	32.0	1.80	2.20
MDA1870-3R3M	3.30	±20%	30.0	28.0	32.0	29.0	2.70	3.30
MDA1870-4R7M	4.70	±20%	28.0	26.0	29.0	26.0	3.70	4.50
MDA1870-6R8M	6.80	±20%	24.0	22.0	25.0	22.0	6.00	7.20
MDA1870-100M	10.0	±20%	21.0	19.0	22.0	19.0	9.20	10.6
MDA1870-150M	15.0	±20%	16.0	14.0	16.0	14.0	12.8	15.5
MDA1870-220M	22.0	±20%	13.5	11.5	13.5	11.5	20.5	24.0
MDA1870-330M	33.0	±20%	12.0	10.0	12.0	10.0	32.0	37.0
MDA1870-470M	47.0	±20%	9.5	8.0	9.5	8.0	40.0	47.0
MDA1870-680M	68.0	±20%	8.0	6.5	8.5	7.2	66.0	76.0
MDA1870-820M	82.0	±20%	6.5	5.7	8.0	6.5	69.0	83.0

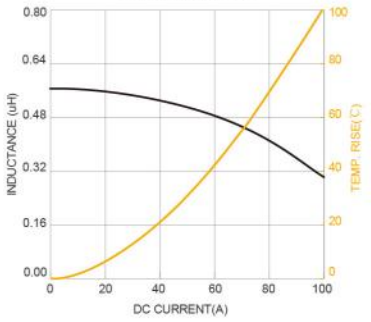
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

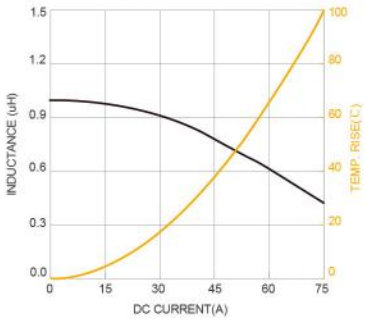
MDA1870-R47M



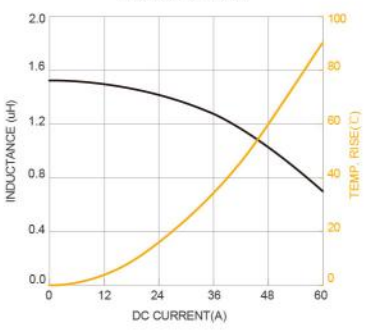
MDA1870-R56M



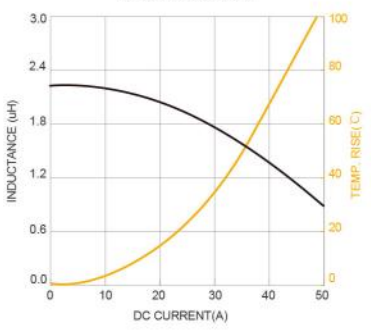
MDA1870-1R0M



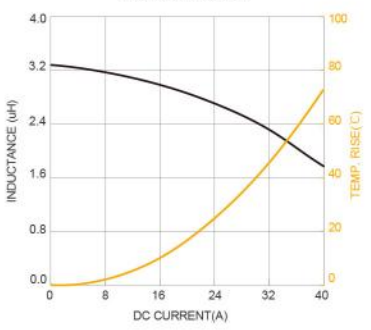
MDA1870-1R5M



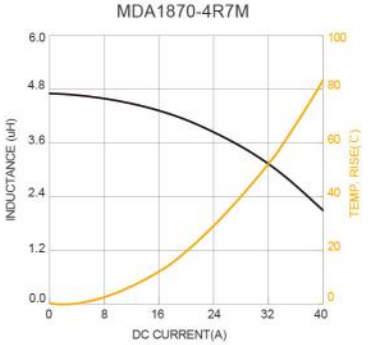
MDA1870-2R2M



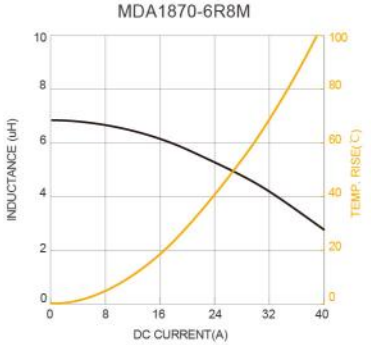
MDA1870-3R3M



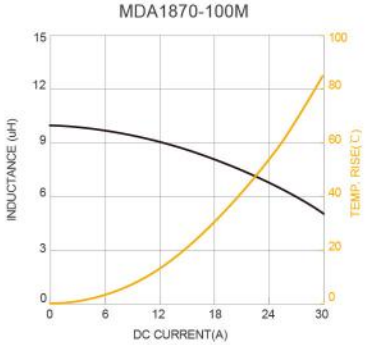
MDA1870-4R7M



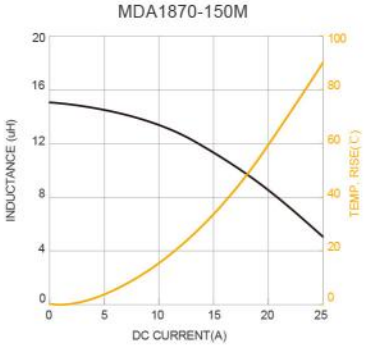
MDA1870-6R8M



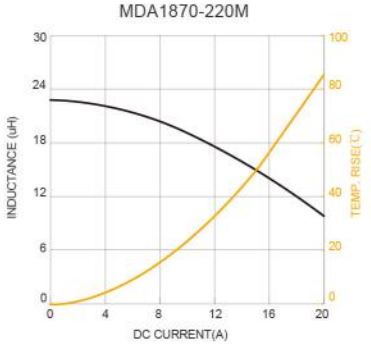
MDA1870-100M



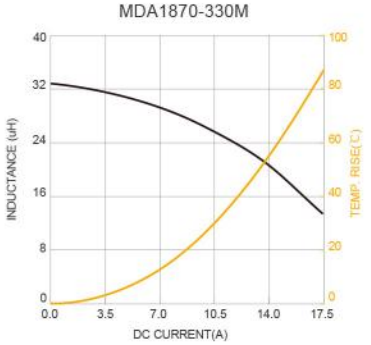
MDA1870-150M



MDA1870-220M

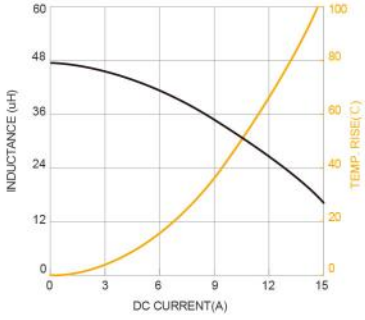


MDA1870-330M

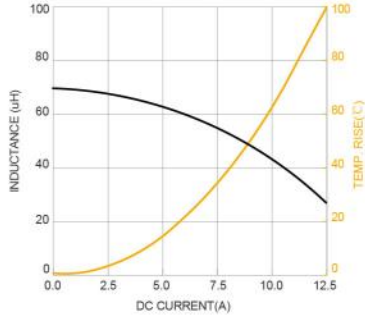


Typical Electrical Characteristics

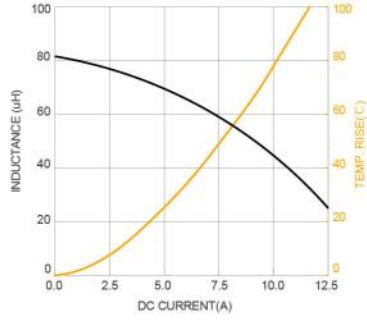
MDA1870-470M



MDA1870-680M



MDA1870-820M

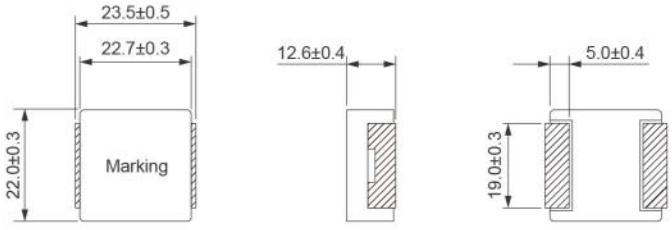


MDA Series

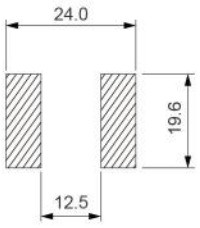
SMD Low Profile High Current Molded Inductor

2313 Size

Dimensions: [mm]



Land Pattern: [mm]



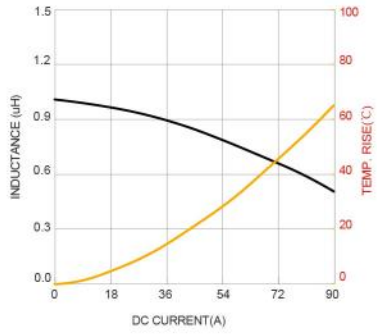
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA2313-1R0M	1.00	±20%	70.0	60.0	0.80	0.95
MDA2313-1R5M	1.50	±20%	62.0	52.0	1.00	1.15
MDA2313-2R2M	2.20	±20%	58.0	48.0	1.05	1.25
MDA2313-3R3M	3.30	±20%	49.0	41.0	1.50	1.75
MDA2313-4R7M	4.70	±20%	47.0	38.0	1.90	2.20
MDA2313-6R8M	6.80	±20%	40.0	36.0	2.70	3.10
MDA2313-100M	10.0	±20%	33.0	28.0	3.80	4.15
MDA2313-150M	15.0	±20%	26.0	23.0	5.10	6.12
MDA2313-220M	22.0	±20%	22.0	15.0	9.20	11.0
MDA2313-330M	33.0	±20%	19.0	12.0	13.5	15.4
MDA2313-470M	47.0	±20%	17.0	12.0	17.3	20.8
MDA2313-680M	68.0	±20%	14.0	12.0	26.2	29.5
MDA2313-820M	82.0	±20%	12.0	9.0	31.0	34.2
MDA2313-101M	100	±20%	11.0	9.0	36.0	40.0

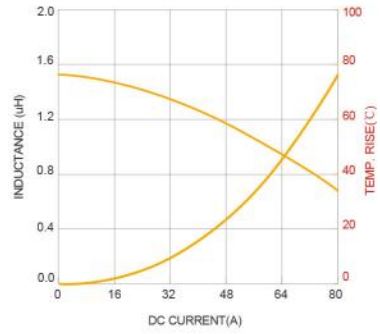
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

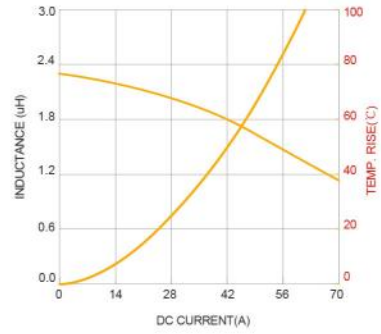
MDA2313-1R0M



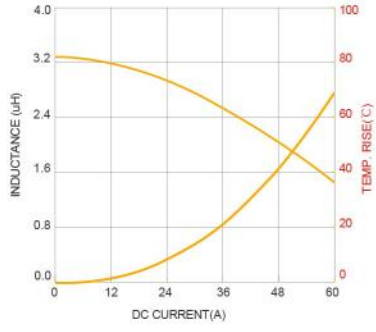
MDA2313-1R5M



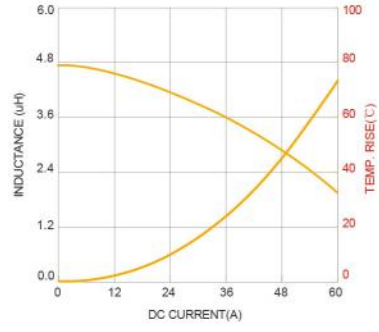
MDA2313-2R2M



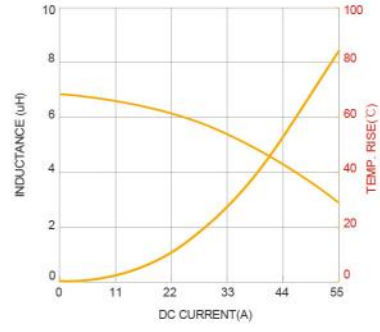
MDA2313-3R3M



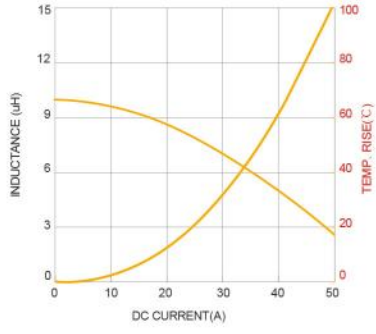
MDA2313-4R7M



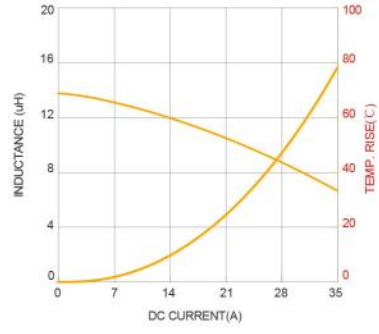
MDA2313-6R8M



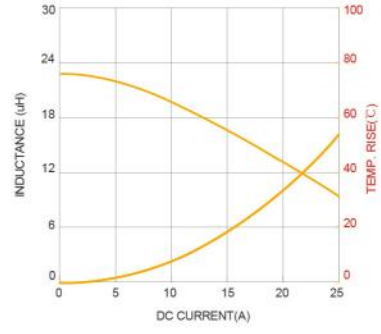
MDA2313-100M



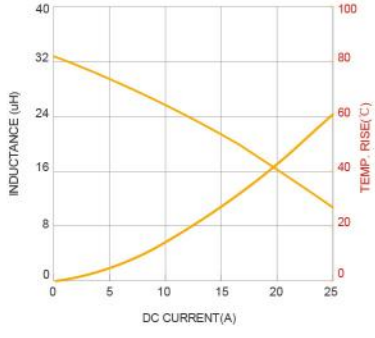
MDA2313-150M



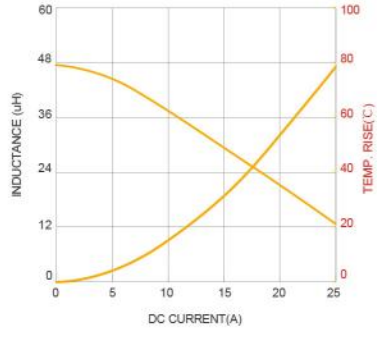
MDA2313-220M



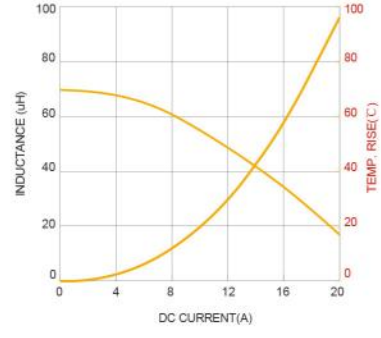
MDA2313-330M



MDA2313-470M

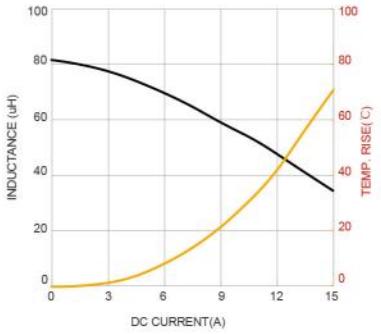


MDA2313-680M

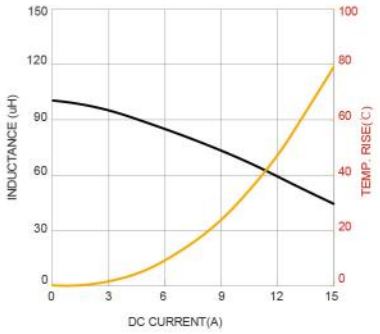


Typical Electrical Characteristics

MDA2313-820M



MDA2313-101M



MDTA Series

SMD Low Profile High Current Molded Inductor

FEATURES

- High current, low DCR,high efficiency
- Very low acoustic noise and very low leakage flux noise
- AEC-Q200 qualified
- 100% Lead(Pb)-Free and RoHS compliant
- Operating temperature: -55 to +155 °C (including self-temperature rise)

APPLICATION

- ADAS
- Headlamps, tail lamps and interior lighting
- HVAC
- Doors, window liti and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and navigation

MDTA20161A

P134

MDTA25201B

P136

MDTA32251B

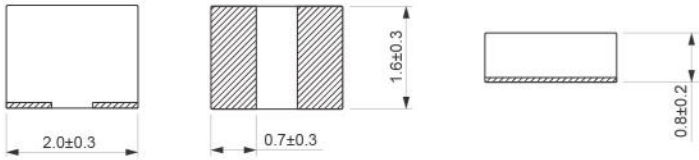
P138

MDTA Series

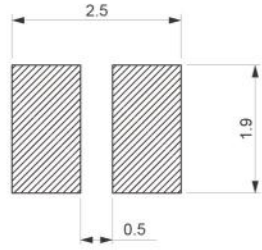
SMD Low Profile High Current Molded Inductor

20161A Size

Dimensions: [mm]



Land Pattern: [mm]



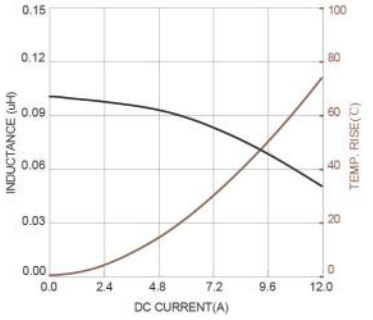
Electrical Properties

Part No	Inductance @100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDTA20161A-R10M	0.10	±20%	8.5	8.0	9.0	8.4	8	14
MDTA20161A-R15M	0.15	±20%	7.6	7.0	8.7	8.0	10	16
MDTA20161A-R24M	0.24	±20%	6.8	6.2	7.3	7.0	15	18
MDTA20161A-R33M	0.33	±20%	6.5	6.0	7.0	6.5	17	20
MDTA20161A-R47M	0.47	±20%	6.0	5.5	6.3	5.5	19	22
MDTA20161A-R68M	0.68	±20%	5.0	4.5	5.2	4.7	24	31
MDTA20161A-1R0M	1.00	±20%	4.0	3.7	4.8	4.2	38	46
MDTA20161A-1R5M	1.50	±20%	3.4	3.0	3.5	3.1	80	96
MDTA20161A-2R2M	2.20	±20%	2.8	2.5	3.0	2.8	120	138
MDTA20161A-3R3M	3.30	±20%	1.7	1.5	2.3	2.0	140	170
MDTA20161A-4R7M	4.70	±20%	1.6	1.4	2.0	1.8	190	220

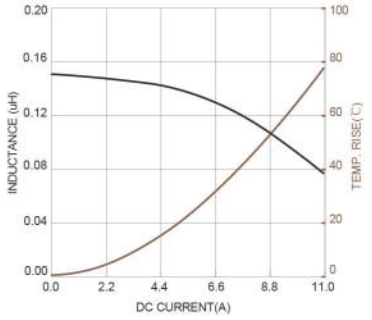
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is△T=40°C

Typical Electrical Characteristics

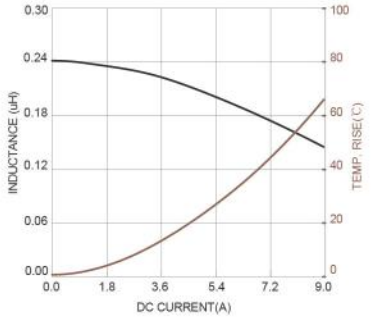
MDTA20161A-R10M



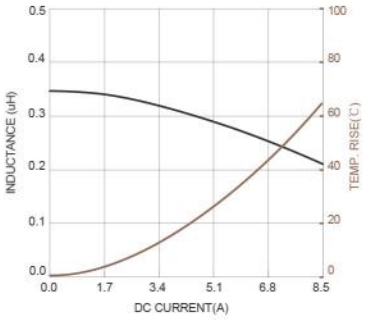
MDTA20161A-R15M



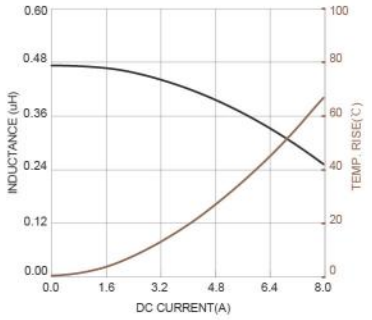
MDTA20161A-R24M



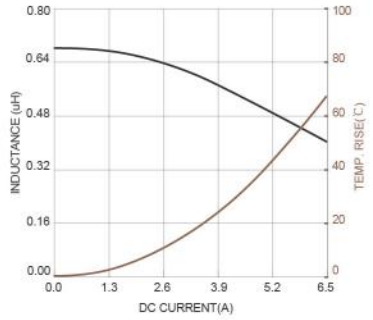
MDTA20161A-R33M



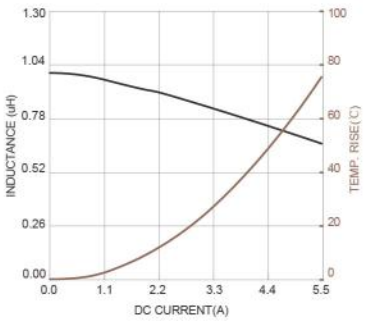
MDTA20161A-R47M



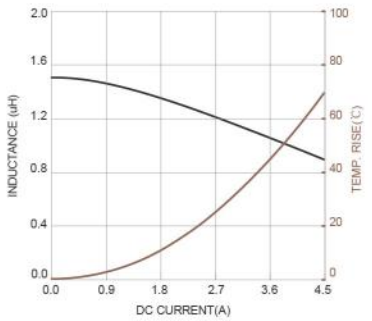
MDTA20161A-R68M



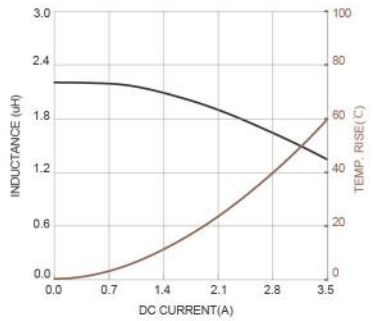
MDTA20161A-1R0M



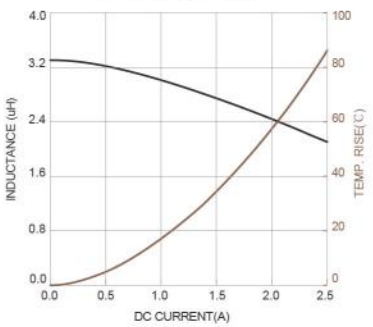
MDTA20161A-1R5M



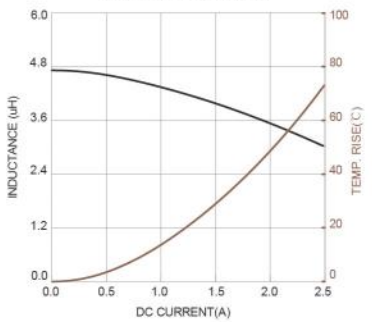
MDTA20161A-2R2M



MDTA20161A-3R3M



MDTA20161A-4R7M

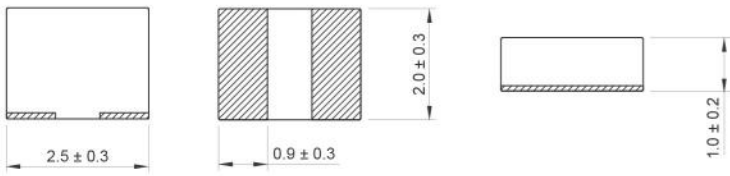


MDTA Series

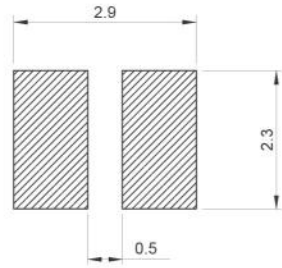
SMD Low Profile High Current Molded Inductor

25201B Size

Dimensions: [mm]



Land Pattern: [mm]



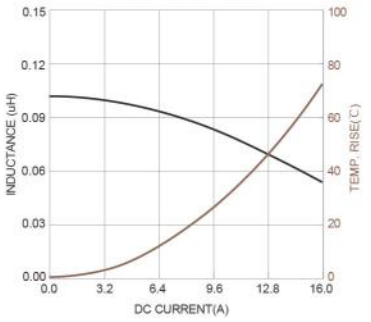
Electrical Properties

Part No	Inductance @100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDTA25201B-R10M	0.10	±20%	12.0	8.0	12.0	10.0	4.0	7.0
MDTA25201B-R22M	0.22	±20%	8.2	7.6	9.6	9.0	9.0	10.8
MDTA25201B-R33M	0.33	±20%	7.0	6.4	8.0	7.5	10.0	12.0
MDTA25201B-R47M	0.47	±20%	6.7	6.0	7.4	6.8	16.0	20.0
MDTA25201B-R68M	0.68	±20%	6.1	5.5	6.5	6.0	19.0	23.0
MDTA25201B-1R0M	1.00	±20%	5.7	5.2	5.8	5.3	31.0	37.0
MDTA25201B-1R5M	1.50	±20%	4.6	4.2	4.7	4.4	27.0	32.0
MDTA25201B-2R2M	2.20	±20%	3.7	3.3	4.0	3.3	52.0	60.0
MDTA25201B-3R3M	3.30	±20%	2.8	2.5	3.0	2.7	80.0	97.0
MDTA25201B-4R7M	4.70	±20%	2.3	2.0	2.8	2.2	170.0	204.0
MDTA25201B-100M	10.0	±20%	1.2	1.05	1.6	1.45	330.0	400.0

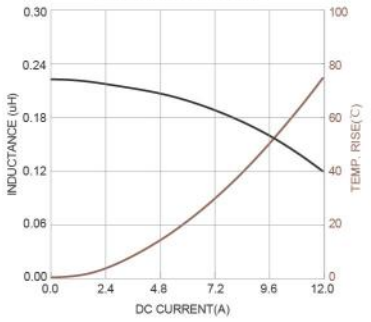
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

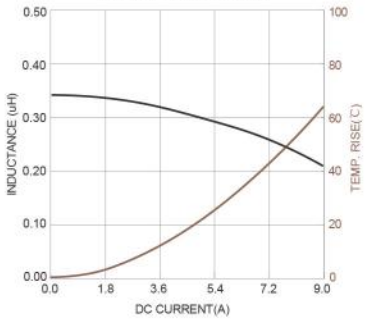
MDTA25201B-R10M



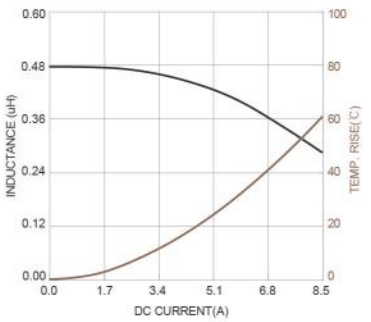
MDTA25201B-R22M



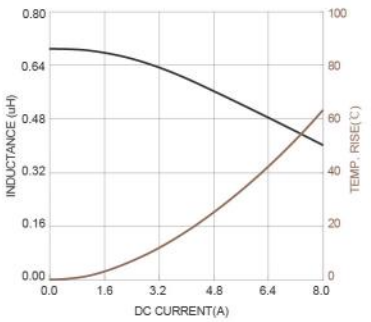
MDTA25201B-R33M



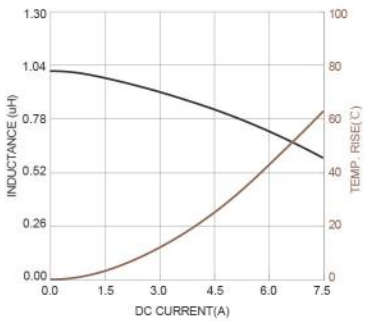
MDTA25201B-R47M



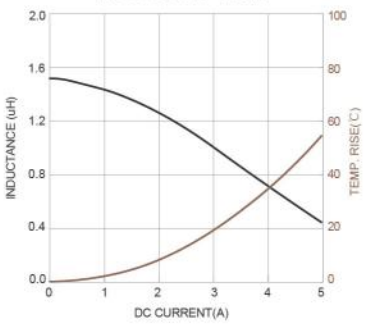
MDTA25201B-R68M



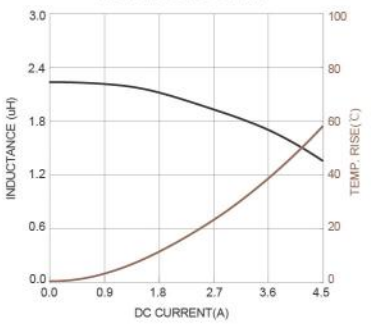
MDTA25201B-1R0M



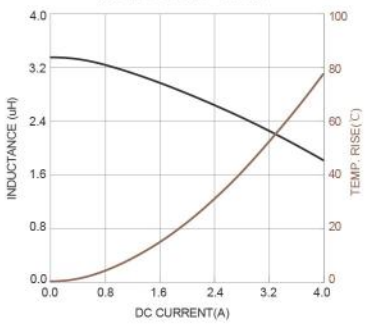
MDTA25201B-1R5M



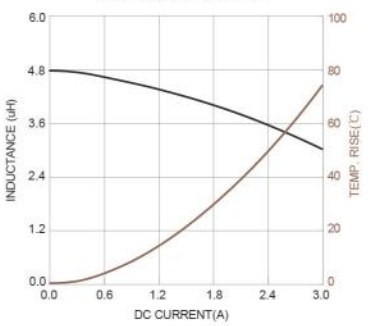
MDTA25201B-2R2M



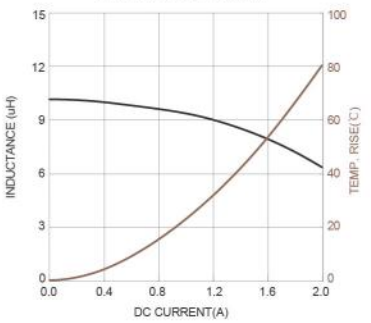
MDTA25201B-3R3M



MDTA25201B-4R7M



MDTA25201B-100M

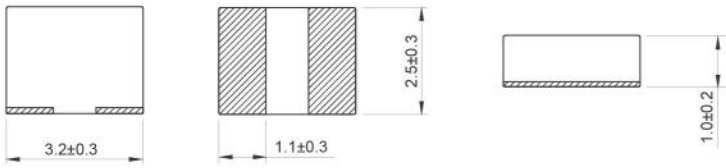


MDTA Series

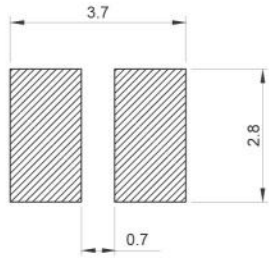
SMD Low Profile High Current Molded Inductor

32251B Size

Dimensions: [mm]



Land Pattern: [mm]



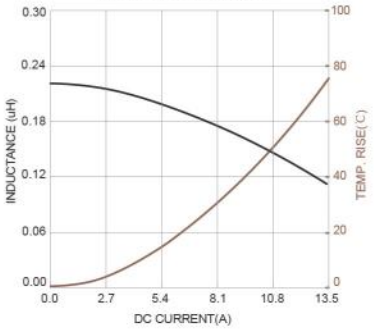
Electrical Properties

Part No	Inductance @100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDTA32251B-R22M	0.22	±20%	9.5	9.0	9.3	8.7	7.4	8.5
MDTA32251B-R33M	0.33	±20%	8.5	8.0	9.2	8.6	9.0	12
MDTA32251B-R47M	0.47	±20%	7.1	6.6	8.3	7.5	17	19
MDTA32251B-R68M	0.68	±20%	6.3	5.8	7.4	6.9	19	24
MDTA32251B-1R0M	1.0	±20%	5.7	5.2	6.6	5.8	26	30
MDTA32251B-1R5M	1.5	±20%	4.6	4.0	5.3	5.0	40	50
MDTA32251B-2R2M	2.2	±20%	4.2	3.7	4.9	4.4	58	70
MDTA32251B-3R3M	3.3	±20%	3.2	2.8	3.5	3.1	75	95
MDTA32251B-4R7M	4.7	±20%	2.5	2.0	2.9	2.5	115	135
MDTA32251B-6R8M	6.8	±20%	2.2	1.8	2.7	2.3	177	210

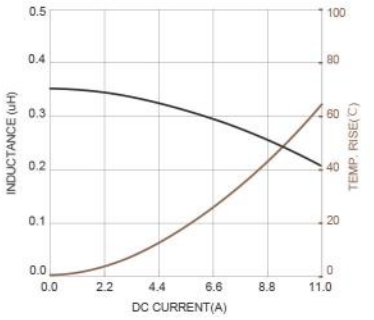
Saturation Current will cause Inductance to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics

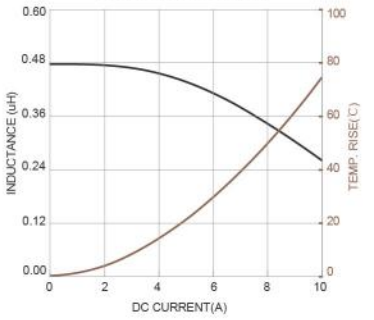
MDTA32251B-R22M



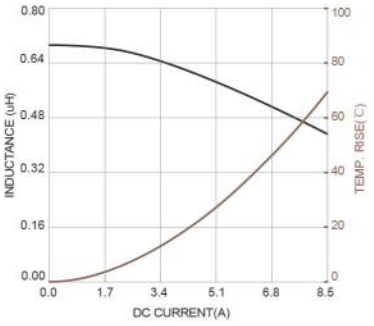
MDTA32251B-R33M



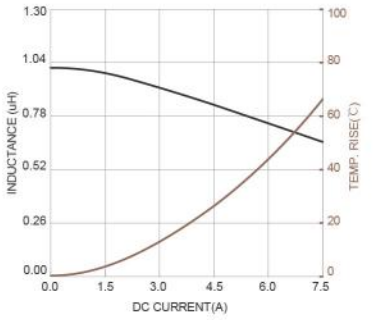
MDTA32251B-R47M



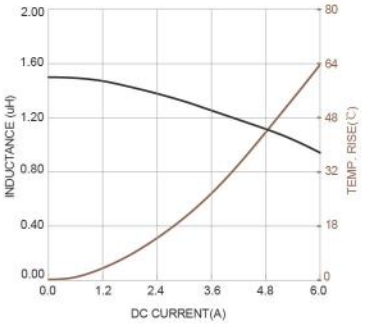
MDTA32251B-R68M



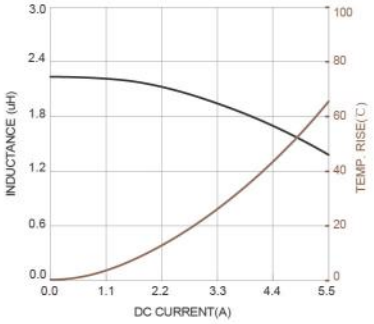
MDTA32251B-1R0M



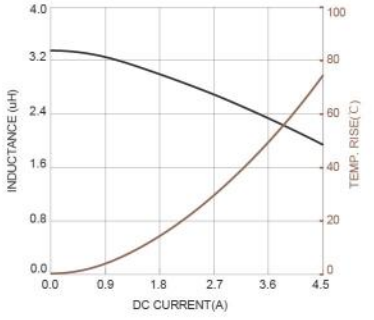
MDTA32251B-1R5M



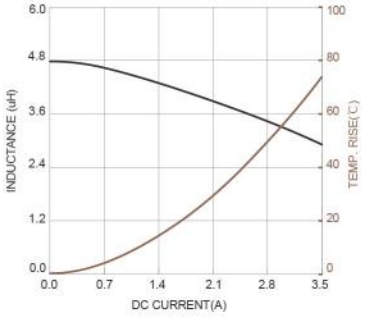
MDTA32251B-2R2M



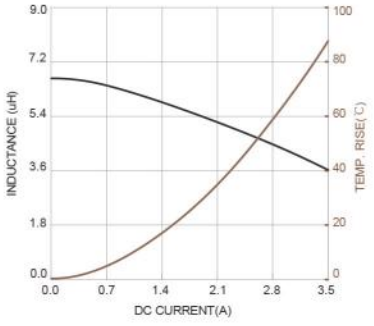
MDTA32251B-3R3M

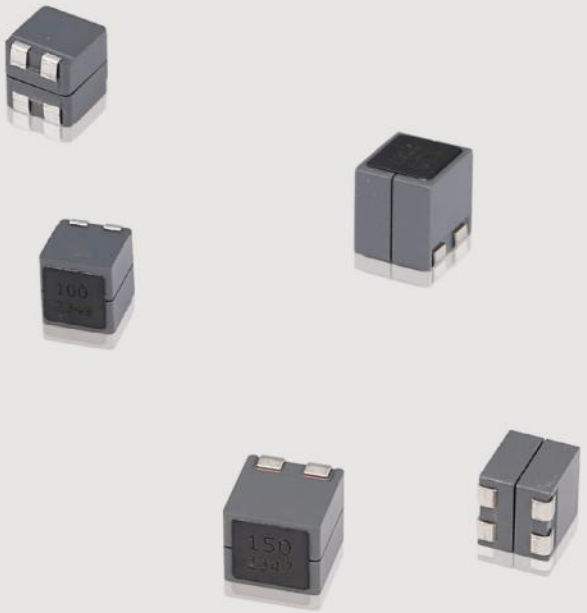


MDTA32251B-4R7M



MDTA32251B-6R8M





DMMA Series

Molded Inductor

FEATURES

- Low loss realized with low DCR.
- High performance realized by metal dust core.
- Ultra low buzz noise, due to composite construction.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified
- Operating temperature:-55 to +125 °C (including self-temperature rise)

APPLICATION

- Automotive applications

DMMA 7078

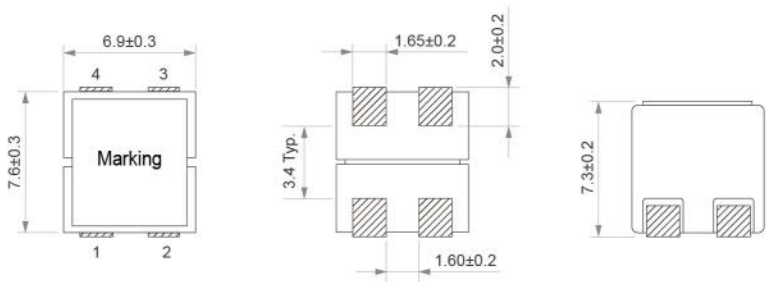
P141

DMMA 1094

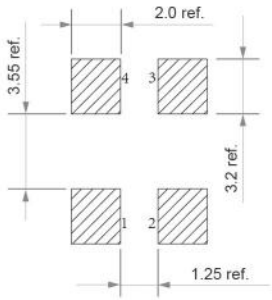
P142

DMMA Series
Molded Inductor
7078 Size

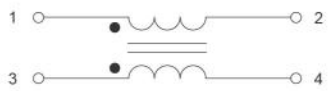
Dimensions: [mm]



Land Pattern: [mm]



Schematic



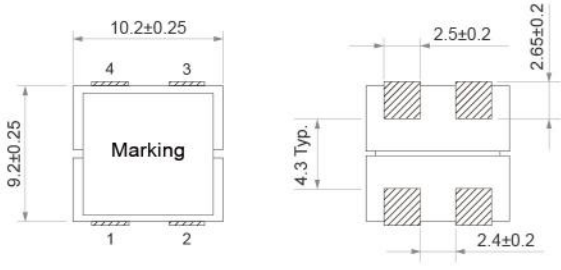
Electrical Properties

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Max. (mΩ)
DMMA7078-1R0M	1.0	±20%	9.8	8.8	19.3	16.5	6.5
DMMA7078-3R3M	3.3	±20%	5.7	5.1	13.0	11.1	19.2
DMMA7078-100M	10.0	±20%	3.5	3.2	6.8	5.8	49.0
DMMA7078-150M	15.0	±20%	2.7	2.4	6.0	5.1	90.0
DMMA7078-220M	22.0	±20%	2.2	2.0	4.3	3.7	134

Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

DMMA Series
Molded Inductor
1094 Size

Dimensions: [mm]



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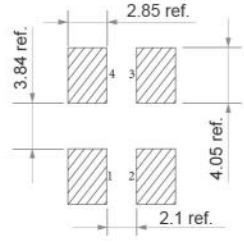
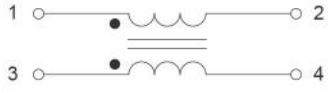


Schematic



Electrical Properties

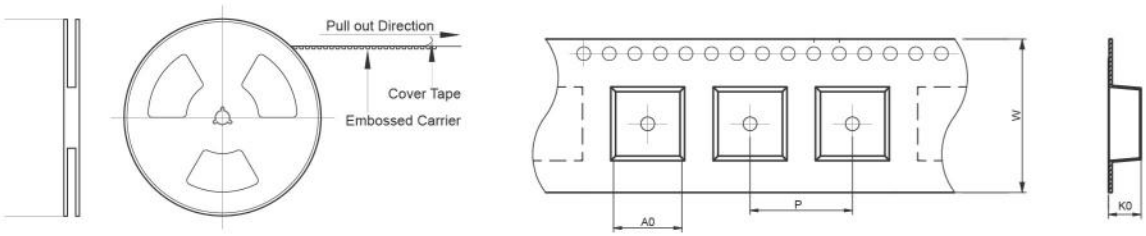
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Max. (mΩ)
DMMA1094-3R3M	3.3	±20%	9.0	8.0	26.0	23.4	8.6
DMMA1094-100M	10.0	±20%	5.8	5.2	12.0	10.0	22.0
DMMA1094-150M	15.0	±20%	4.5	4.0	9.0	7.7	40.8
DMMA1094-220M	22.0	±20%	3.6	3.2	8.5	7.3	56.0

Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

可靠性测试
Reliability Test

NO	Stress Tests	Reference	Additional Requirements
1	High Temperature Exposure (Storage)	MIL-STD-202 Method 108	1000 hrs. at rated operating temperature(e.g. 155°C part can be stored for 1000 hrs. @155℃ Same applies for 150°C and 125°C. Unpowered.Measurement at 24±2 hours after test conclusion
2	Temperature Cycling	JESD22 Method JA-104	1000 cycles (-55°C to +155°C). Note: If 125°C part or 150°C part the 1000 cycles will be at that temperature. Measurement at 24±2 hours after test conclusion. 30min maximum dwell time at each temperature extreme. 1 min. maximum transition time.
3	Biased Humidity	MIL-STD-202 Method 103	1000 hours 85±2℃°C/85%±3%RH. Unpowered. Measurement at 24±4 hours after test conclusion.
4	High Temperature Operational Life	MIL-PRF-27	1000 hrs. @ 155°C. If 150°C or 125°C part will be tested at that temperature. Measurement at 24±4 hours after test conclusion
5	External Visual	MIL-STD-883 Method 2009	Inspect device construction,marking and workmanship. Electrical Test not required
6	Physical Dimension	JESD22 Method JB-100	Verify physical dimensions to the applicable device detail specification.Note: User(s) and Suppliers spec. Electrical Test not required.
7	Resistance to Solvents	MIL-STD-202 Method 215	Note: Add Aqueous wash chemical. OKEM Clean or equivalent. Do not use banned solvents.
8	Mechanical Shock	MIL-STD-202 Method 213	Figure 1 of Method 213 Condition C
9	Vibration	MIL-STD-202 Method 204	5g's for 20 minutes, 12 cycles each of 3 orientations Note: Test from 10-2000 Hz
10	Resistance to Soldering Heat	MIL-STD-202 Method 210	Condition B No pre-heat of samples. Note: Single Wave Solder- Procedure 2 for SMD and Procedure1for Leaded with solder within 1.5mm of device body.
11	Thermal Shock	MIL-STD-202 Method 107	-55°C/+155°C.Note: Number of cvcles required is 300. Maximum transfer time is 20 seconds. Dwell time is 15 minutes. Below 155°C use Condition A for maximum temperature.
12	ESD	AEC-Q200-002 or ISO/DIS 10605	
13	Solderability	J-STD-002	For both Leaded & SMD. Electrical Test not required. Maanification 50X. Conditions: Leaded: Method A @235°C, categorv 3. SMD: a) Method B. 4 hrs @ 155°C dry heat @235℃ b) Method B @215°C categorv 3 c) Method D category 3 @260°C
14	Electrical Characterization	User Spec	Parametricallv test per lot and sample size requirements. summary to show Min. Max, Mean and Standard deviation at room as well as Min and Max operating temperatures.
15	Flammability	UL-94	V-0 or V-1 Acceptable
16	Board Flex	AEC-Q200-005	60 sec minimum holding time
17	Terminal Strength(SMD)	AEC-Q200-006	Run through IR reflow for 3 times With the component mounted on a PCB with the device to be tested, apply a 17.7 N (1.8 Kg) force to the side of a device being tested. This force shall be applied for 60 +1 seconds. Also the force shall be applied gradually as not to apply a shock to the component being tested

包装信息
Packing Information



Size	A (mm)	W (mm)	A0 (mm)	P (mm)	K0 (mm)	Quantity (pcs)/Real
FBA0402	178±2	8±0.3	0.62±0.03	4±0.1	0.60±0.03	10000
FBA0603	178±2	8±0.3	0.96+0.05	4±0.1	0.95±0.05	4000
FBA0805	178±2	8±0.3	1.3±0.05	4±0.1	0.95±0.05	4000
FBA1206	178±2	8±0.3	1.75±0.1	4±0.1	1.25±0.1	3000
FBHA0402	178±2	8±0.3	0.62±0.03	4±0.1	0.60±0.03	10000
FBHA0603	178±2	8±0.3	0.96+0.05	4±0.1	0.95±0.05	4000
FBHA0805	178±2	8±0.3	1.3±0.05	4±0.1	0.95±0.05	4000
FBHA1206	178±2	8±0.3	1.75±0.1	4±0.1	1.25±0.1	3000
FBHA1806	178±2	12±0.3	1.75±0.1	4±0.1	1.75±0.1	2000
FBHA1812	178±2	12±0.3	3.45±0.1	8±0.1	1.60±0.1	1000
FBHA0402S	178±2	8±0.3	0.62±0.03	4±0.1	0.60±0.03	10000
FBHA0603S	178±2	8±0.3	0.96+0.05	4±0.1	0.95±0.05	4000
FBHA0805S	178±2	8±0.3	1.3±0.05	4±0.1	0.95±0.05	4000
FBHA1206S	178±2	8±0.3	1.75±0.1	4±0.1	1.25±0.1	3000
ACMA3225	178±2	8±0.3	2.88±0.1	4±0.1	2.5±0.1	2000
ACMA4532	178±2	8±0.3	3.6±0.1	8±0.1	3±0.1	500
ACMV3225	330±2	12±0.3	2.7±0.1	4±0.1	2.8±0.1	5000
ACMV4532	330±2	12±0.3	3.5±0.1	8±0.1	3.1±0.1	2500
BCMA2012	178±2.0	8.0±0.3	1.50±0.1	4.0±0.1	1.45±0.1	2000
BCMA3216	178±2.0	8.0±0.3	1.88±0.1	4.0±0.1	2.1±0.1	2000
BCMA3225	178±2.0	8.0±0.3	2.88±0.1	4.0±0.1	2.50±0.1	2000
BCMA4532	178±2.0	12.0±0.3	3.6±0.1	4.0±0.1	3.0±0.1	500
BCMA5020	330±2.0	12.0±0.3	5.65±0.1	8.0±0.1	2.7±0.1	2500
BCMA7060	330±2.0	16.0±0.3	6.25±0.1	12.0±0.1	3.6±0.1	1500
BCMA9250	330±2.0	16.0±0.3	6.5 typ	12.0±0.1	5.2 ref.	1000

Size	A (mm)	W (mm)	A0 (mm)	P (mm)	K0 (mm)	Quantity (pcs)/Real
BCMA9070	330±2.0	24.0±0.3	7.6±0.1	16.0±0.1	5.10±0.1	800
BCMA1009	330±2.0	24±0.3	8.6±0.1	12±0.1	5.4±0.1	1000
BCMA1211	330±2.0	24±0.3	11.3±0.1	16±0.1	6.6±0.1	500
MDA4020	330±2.0	12.0±0.3	4.5±0.1	8.0±0.1	2.3±0.1	3000
MDA5030	330±2.0	12.0±0.3	5.5±0.1	8.0±0.1	3.3±0.1	2000
MDA7030	330±2.0	16.0±0.3	7.0±0.1	12.0±0.1	3.3±0.1	1000
MDA7050	330±2.0	16.0±0.3	6.9±0.1	12.0±0.1	5.4±0.1	800
MDA1040	330±2.0	24±0.3	10.4±0.1	16±0.1	4.3±0.1	500
MDA1050	330±2.0	24±0.3	10.4±0.1	16±0.1	5.4±0.1	500
MDA1350	330±2.0	24±0.3	13.1±0.1	16±0.1	5.4±0.1	500
MDA1360	330±2.0	24±0.3	13.1±0.1	16±0.1	6.3±0.1	500
MDA1365	330±2.0	24.0±0.3	13.1±0.1	16±0.1	6.8±0.1	500
MDA1870	330±2.0	32.0±0.3	17.5±0.1	24±0.1	7.3±0.1	200
MDA7054HT	330±2.0	16.0±0.3	7.6±0.1	12.0±0.1	5.7±0.1	500
MDA1054HT	330±2.0	24.0±0.3	10.4±0.1	16±0.1	5.7±0.1	500
MDTA20161A	178±2.0	8±0.3	1.9±0.1	4±0.1	1.2±0.1	3000
MDTA25201B	178±2.0	8±0.3	2.4±0.1	4±0.1	1.4±0.1	3000
MDTA32251B	178±2.0	8±0.3	2.9±0.1	4±0.1	1.4±0.1	3000
DMMA7078	330±2.0	24.0±0.3	8.1±0.1	12.0±0.1	7.8±0.1	500
DMMA1094	330±2.0	24.0±0.3	9.6±0.1	16.0±0.1	11.25±0.1	300
NRSA2520B	180±2.0	8.0±0.1	2.4±0.1	4.0±0.1	1.4±0.1	2000
NRSA3012B	178±2.0	8.0±0.1	3.3±0.1	4.0±0.1	1.4±0.1	2000
NRSA3015B	178±2.0	8.0±0.3	3.2±0.1	4.0±0.1	1.7±0.1	2000
NRSA4014B	330±2.0	12.0±0.3	4.25±0.1	8.0±0.1	1.4±0.1	4500
NRSA4018B	330±2.0	12.0±0.3	4.3±0.1	8.0±0.1	2.25±0.1	3000
NRSA4030	330±2.0	12.0±0.3	4.25±0.1	8.0±0.1	3.25±0.1	2000
NRSA5020	330±2.0	12.0±0.3	5.3±0.1	8.0±0.1	2.3±0.1	2500
NRSA5040	330±2.0	12.0±0.3	5.3±0.1	8.0±0.1	4.2±0.1	1500
NRSA6020	330±2.0	16.0±0.3	6.4±0.1	12.0±0.1	2.3±0.1	2000
NRSA6028	330±2.0	16.0±0.3	6.4±0.1	8.0±0.1	3.3±0.1	2000
NRSA6045	330±2.0	16.0±0.3	6.4±0.1	12.0±0.1	4.7±0.1	1000
NRSA8040	330±2.0	16.0±0.3	8.55±0.1	12.0±0.1	4.4±0.1	1000

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