

DMMA Series

Molded Inductor



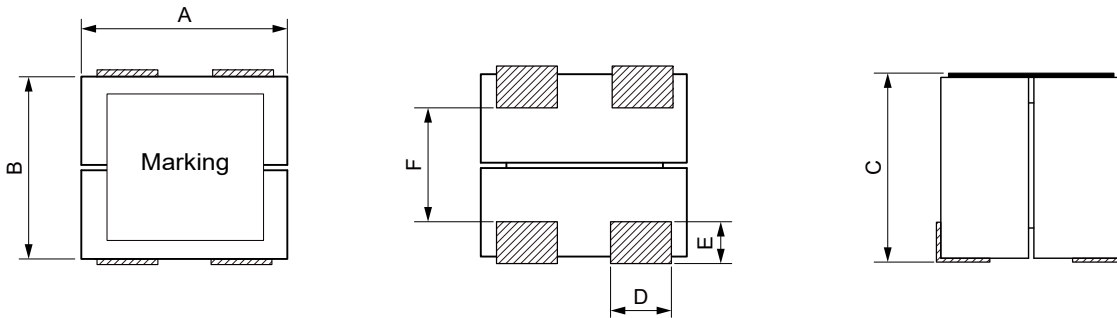
FEATURES

- Low loss realized with low DCR.
- High performance realized by metal power core.
- Ultra low buzz noise, due to composite construction.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified
- Operating temperature: -40 to +125 °C (including self-temperature rise)

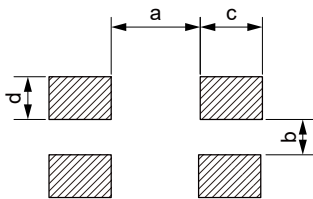
APPLICATION

- Automotive applications
- Intelligent Cockpit Digital Amplifier

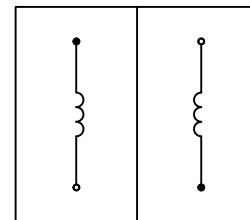
Dimensions: [mm]



Land Pattern: [mm]



Schematic:



Series	A	B	C	D	E	F	a	b	c	d
DMMA06077	6.9±0.2	7.7±0.3	7.3±0.3	1.7±0.3	2.0±0.3	4.0 typ.	3.45	1.2	3.2	2.0
DMMA1009	10.2±0.2	9.5±0.2	10.85±0.25	2.3±0.3	2.65±0.2	4.0 typ.	3.85	2.1	4.05	2.85

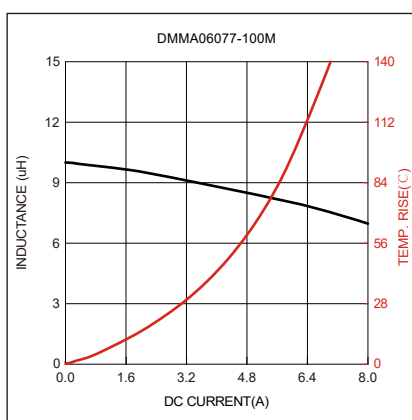
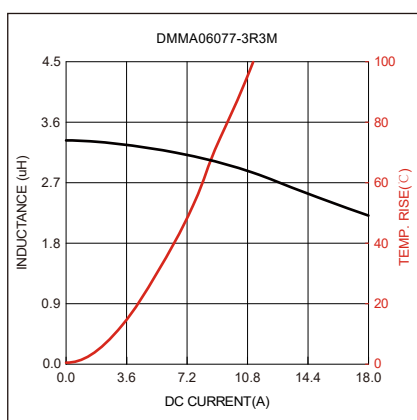
Electrical Properties:

Part No	Inductance @1MHz/1V (μ H)	Tolerance	DC Resistance Typ. (m Ω)	DC Resistance Max. (m Ω)	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)
DMMA06077-3R3M	3.3	$\pm 20\%$	16	18	14.5	6.5
DMMA06077-100M	10	$\pm 20\%$	43	49	6.8	3.5

Saturation Current results in a maximum Lo drop of 25%.

Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$

Typical Electrical Characteristics:



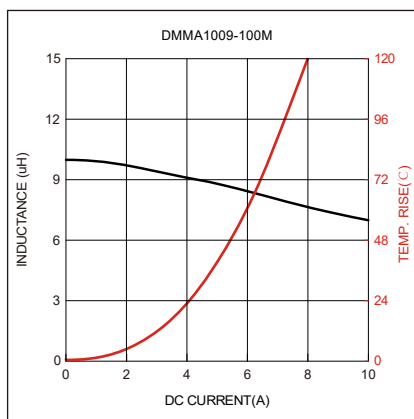
Electrical Properties:

Part No	Inductance @1MHz/1V (μ H)	Tolerance	DC Resistance Typ. (m Ω)	DC Resistance Max. (m Ω)	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)
DMMA1009-100M	10	$\pm 20\%$	18	22	10	5.2

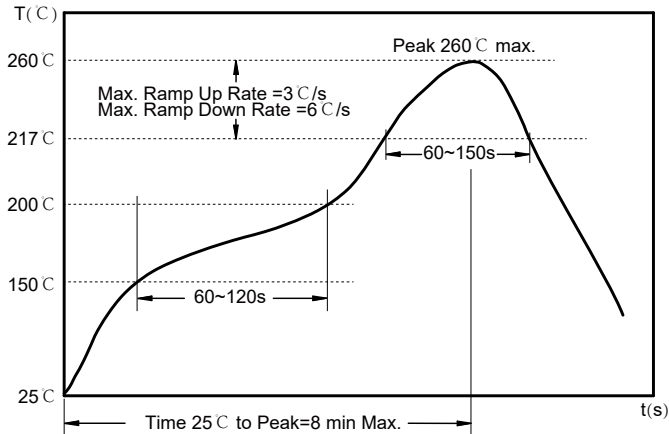
Saturation Current results in a maximum Lo drop of 30%.

Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$

Typical Electrical Characteristics:



Soldering Reflow:



Preheat condition: 150 ~200 °C/ 60~120 sec.

Allowed time above 217 °C: 60~150 sec.

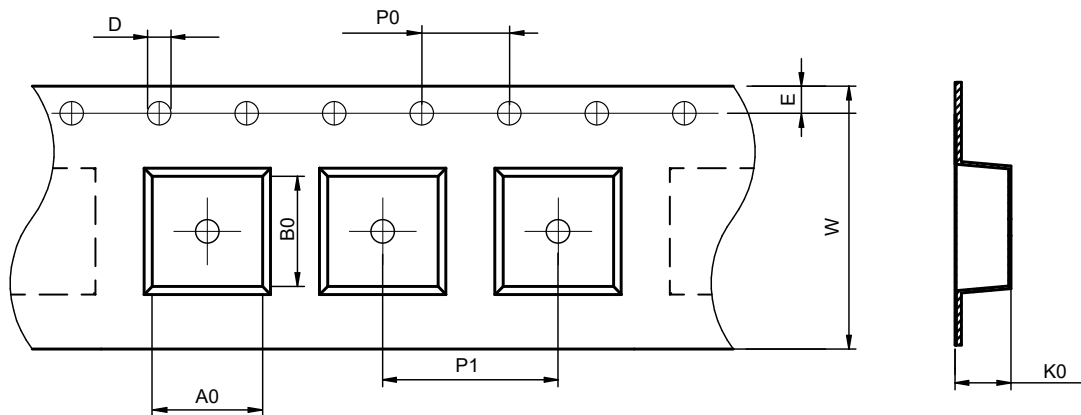
Max temperature: 260 °C.

Time within 5 °C of actual Peak Temperature: 30 max. sec.

Allowed Reflow time: 2x max.

Packaging Information:

Tape Dimension:

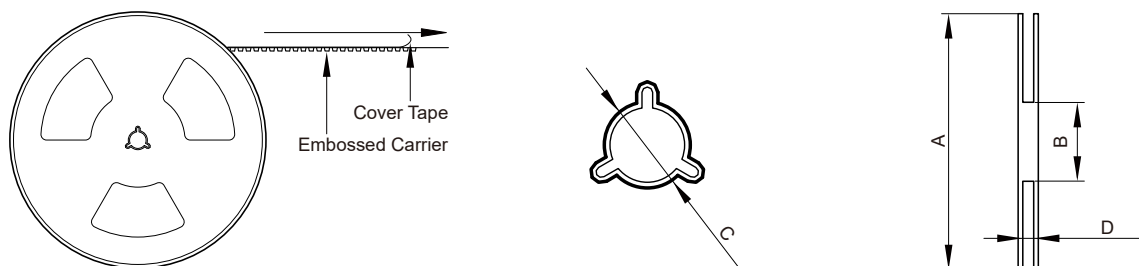


Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)
06077	8.2±0.1	7.3±0.1	1.55±0.1	4.0±0.1	12.0±0.1	16.0±0.3	7.8±0.1	1.75±0.1
1009	10.2±0.1	10.7±0.1	1.55±0.1	4.0±0.1	16.0±0.1	24.0±0.3	11.5±0.1	1.75±0.1

Product Marking:

Marking	Printing
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Reel Dimension : [mm]



Series	A (mm)	B (mm)	C (mm)	D (mm)	Qty/Reel (pcs)	Qty /Inner box (pcs)	Qty /Carton box (pcs)
06077	330±2.0	100±1.0	13.0±1.0	17.4±1.0	500	1000	3000
1009	330±2.0	100±1.0	13.0±1.0	24.4±1.0	200	400	1200

Cautions and Warnings:

Storage Conditions :

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max).If the storage period elapses, the soldering of the terminal electrodes may deteriorate.The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components.The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does.As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.