

MDCA Series
SMD Power Inductor
Size 7030



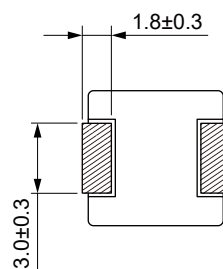
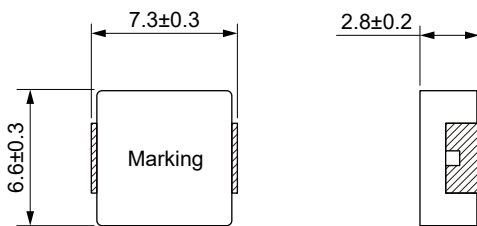
FEATURES

- Shielded construction.
- Capable of corresponding high frequency.
- Low loss realized with low DCR.
- High performance (Isat) realized by Carbonyl Powder.
- 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)
- Quantity: 1000pcs

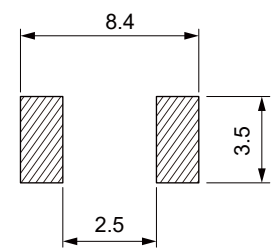
APPLICATION

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

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)
MDCA7030-R10N	0.10	±30%	32.5	60.0	1.20	1.70
MDCA7030-R22N	0.22	±30%	23.0	40.0	2.10	2.80
MDCA7030-R33M	0.33	±20%	20.0	32.0	3.50	3.90
MDCA7030-R47M	0.47	±20%	17.5	26.0	4.00	4.20
MDCA7030-R56M	0.56	±20%	16.5	25.5	4.70	5.00
MDCA7030-R68M	0.68	±20%	15.5	25.0	4.80	5.50
MDCA7030-R82M	0.82	±20%	13.0	24.0	6.70	8.00
MDCA7030-1R0M	1.00	±20%	11.0	22.0	8.30	10.0
MDCA7030-1R5M	1.50	±20%	9.00	18.0	13.0	15.0
MDCA7030-2R2M	2.20	±20%	8.00	14.0	18.0	20.0
MDCA7030-3R3M	3.30	±20%	6.00	13.5	28.0	30.0
MDCA7030-4R7M	4.70	±20%	5.50	10.0	37.0	40.0
MDCA7030-5R6M	5.60	±20%	5.00	9.00	43.0	48.0
MDCA7030-6R8M	6.80	±20%	4.50	8.00	54.0	60.0
MDCA7030-8R2M	8.20	±20%	4.00	7.50	64.0	68.0

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MDCA7030-100M	10.0	±20%	3.50	6.00	75.0	85.0
MDCA7030-150M	15.0	±20%	3.00	4.00	107	123
MDCA7030-220M	22.0	±20%	2.00	3.50	165	190

Saturation Current will cause L to drop approximately 30%

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

Typical Electrical Characteristics:

