

# MDCA Series

## SMD Power Inductor

### Size 7030



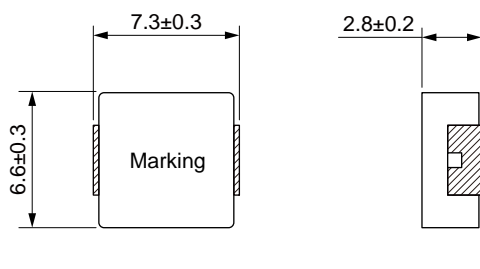
#### FEATURES

- 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

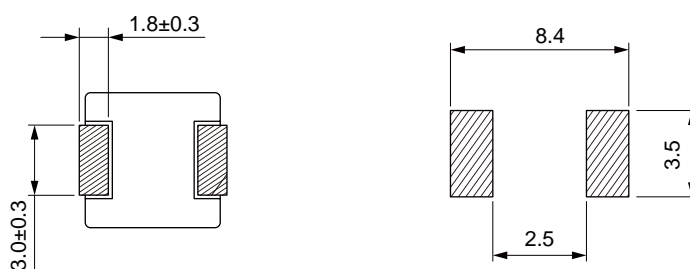
#### APPLICATION

- Headlamps, tail lamps and interior lighting
- 
- Doors, window lift and seat control
- 
- 
- 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)
	0.10		32.5	60.0	1.20	1.70
	0.22		23.0	40.0	2.10	2.80
	0.33		20.0	32.0	3.50	3.90
	0.47		17.5	26.0	4.00	4.20
MDCA7030-R56M	0.56		16.5	25.5	4.70	5.00
	0.68		15.5	25.0	4.80	5.50
	0.82		13.0	24.0	6.70	8.00
	1.00		11.0	22.0	8.30	10.0
MDCA7030-1R5M	1.50		9.00	18.0	13.0	15.0
	2.20		8.00	14.0	18.0	20.0
	3.30		6.00	13.5	28.0	30.0
	4.70		5.50	10.0	37.0	40.0
MDCA7030-5R6M	5.60		5.00	9.00	43.0	48.0
	6.80		4.50	8.00	54.0	60.0
	8.20		4.00	7.50	64.0	68.0

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
	10.0		3.50	6.00	75.0	85.0
MDCA7030-150M	15.0		3.00	4.00		
	22.0		2.00	3.50	165	

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:

