

**MDA Series**  
**SMD Low Profile High Current Molded Inductor**  
**Size 7050**



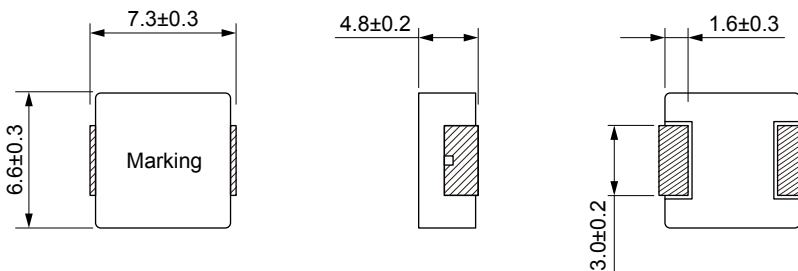
**FEATURES**

- 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.
- High reliability -Reliability test complied to AEC-Q200
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 800PCS

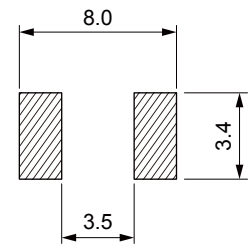
**APPLICATION**

- 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)
MDA7050-R47M	0.47	±20%	22.0	22.0	2.90	3.30
MDA7050-R68M	0.68	±20%	20.0	20.0	3.60	4.10
MDA7050-1R0M	1.00	±20%	17.0	16.0	5.60	6.20
MDA7050-1R5M	1.50	±20%	15.0	13.0	6.60	7.30
MDA7050-2R2M	2.20	±20%	14.0	10.0	10.0	11.5
MDA7050-3R3M	3.30	±20%	13.0	9.5	14.0	16.2
MDA7050-4R7M	4.70	±20%	11.0	8.8	20.8	24.0
MDA7050-5R6M	5.60	±20%	10.0	8.0	28.0	33.0
MDA7050-6R8M	6.80	±20%	9.0	7.6	30.0	36.0
MDA7050-8R2M	8.20	±20%	7.5	6.5	38.5	45.0

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA7050-100M	10.0	±20%	7.0	6.0	44.0	53.0
MDA7050-150M	15.0	±20%	5.0	4.0	73.0	85.0
MDA7050-220M	22.0	±20%	4.2	3.6	122	142
MDA7050-330M	33.0	±20%	3.0	2.3	142	170
MDA7050-470M	47.0	±20%	2.6	1.8	275	320

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:

