

**MDA Series**  
**SMD Low Profile High Current Molded Inductor**  
**Size 1050**



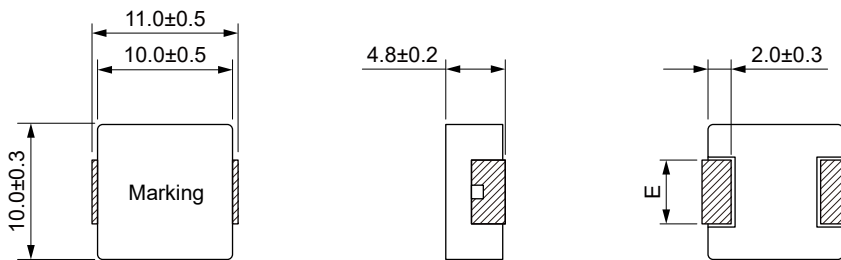
**FEATURES**

- 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: 500PCS

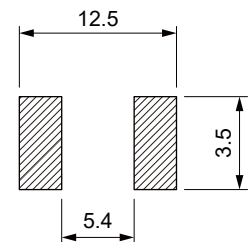
**APPLICATION**

- 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)	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

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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 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:

