

**MDA Series**  
**SMD Low Profile High Current Molded Inductor**  
**Size 4020**



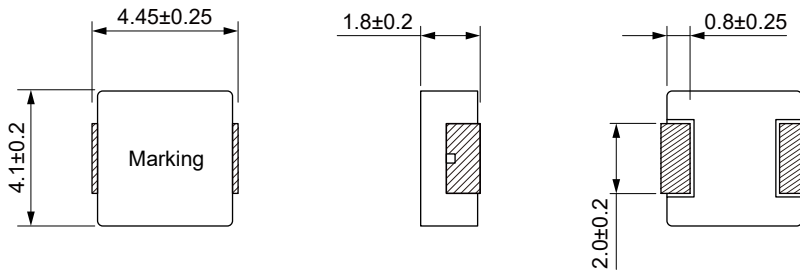
**FEATURES**

- 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: 3000PCS

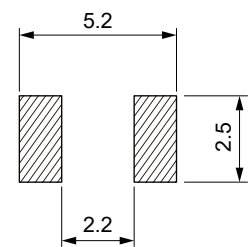
**APPLICATION**

- 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)
MDA4020-R10M	0.10	±20%	16.0	14.0	26.0	22.0	2.90	3.20
MDA4020-R22M	0.22	±20%	14.0	12.5	15.0	13.0	4.80	5.50
MDA4020-R33M	0.33	±20%	12.0	11.0	10.5	9.5	7.50	8.30
MDA4020-R47M	0.47	±20%	10.0	9.0	9.0	8.0	9.50	11.0
MDA4020-R68M	0.68	±20%	9.0	8.0	7.6	6.6	11.6	13.5
MDA4020-R82M	0.82	±20%	8.0	7.0	6.0	5.5	16.3	18.8
MDA4020-1R0M	1.00	±20%	7.5	6.5	5.5	5.0	19.0	22.0
MDA4020-1R5M	1.50	±20%	6.7	5.8	5.2	4.8	27.0	31.0
MDA4020-2R2M	2.20	±20%	5.5	5.0	4.5	4.0	41.0	48.0
MDA4020-3R3M	3.30	±20%	4.5	3.5	3.1	2.7	65.0	75.0
MDA4020-4R7M	4.70	±20%	3.8	3.2	2.8	2.5	84.0	95.0

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MDA4020-5R6M	5.60	±20%	3.2	2.8	2.6	2.3	97.0	115
MDA4020-6R8M	6.80	±20%	2.9	2.5	2.4	2.1	131	157
MDA4020-8R2M	8.20	±20%	2.6	2.3	2.2	2.0	140	168
MDA4020-100M	10.0	±20%	2.4	2.2	2.1	1.9	165	215

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:

