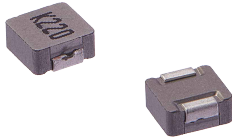


# MDA Series

## SMD Low Profile High Current Molded Inductor

### Size 4020



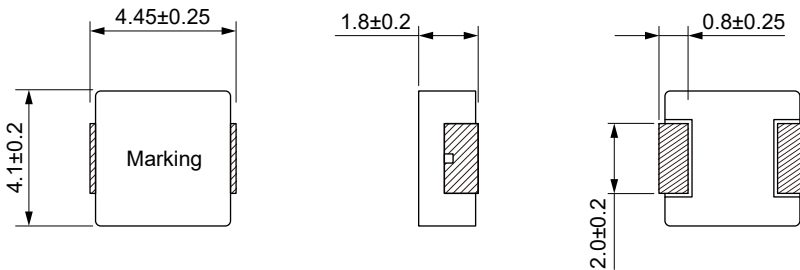
#### FEATURES

- 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.
- AEC-Q200 qualified
- Operating temperature: -55 to +155 °C
- Quantity: 3000PCS

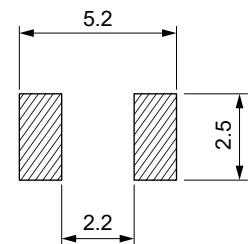
#### APPLICATION

- Noise filter for various drive circuitry requiring high temp. operation and peak current handing capability.
- Boost-Converter
- Buck-Converter DC/DC

#### 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-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
MDA4020-1R0M	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
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:

