

MDE Series
Molding Power Inductors
Size 0518



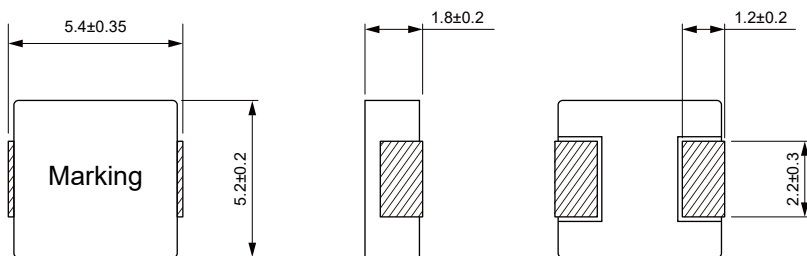
FEATURES

- High rated current
- Frequency up to 3 MHz
- 125 °C maximum total temperature operation
- Low core loss
- Ultra low buzz noise due to molding construction
- Halogen Free & ROHS compliant
- Operating temperature range - 55 °C to + 125 °C
- Quantity: 2000pcs

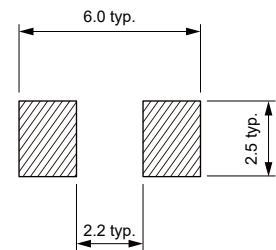
APPLICATION

- Laptops and PCs
- Switch and servers
- Base stations
- DC/DC converters
- Battery powered devices
- SSD modules

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

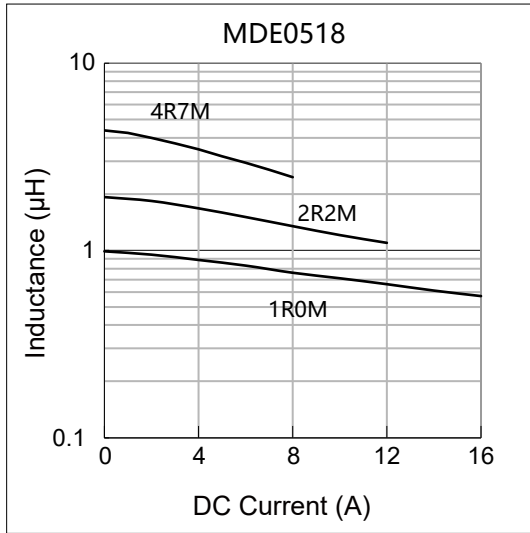
Part No	Inductance @ 100kHz/1V (μH)	Tolerance	DC Resistance Max. (mΩ)	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)
MDE0518-R47M	0.47	±20%	9.00	15.5	10.5
MDE0518-R56M	0.56	±20%	10.0	15.0	9.50
MDE0518-R68M	0.68	±20%	13.8	11.2	8.90
MDE0518-1R0M	1.00	±20%	17.0	9.00	8.00
MDE0518-1R5M	1.50	±20%	26.0	8.00	7.50
MDE0518-2R2M	2.20	±20%	35.0	6.50	5.00
MDE0518-3R3M	3.30	±20%	58.0	5.00	4.50
MDE0518-4R7M	4.70	±20%	85.0	4.00	3.50
MDE0518-6R8M	6.80	±20%	120	3.40	2.80
MDE0518-100M	10.0	±20%	155	3.00	2.50

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:

Inductance vs DC Current Characteristics:



Temperature Rise vs DC Current Characteristics:

