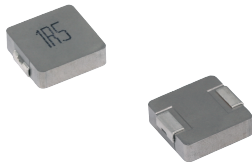


**MDE Series**  
**Molding Power Inductors**  
**Size 0412**



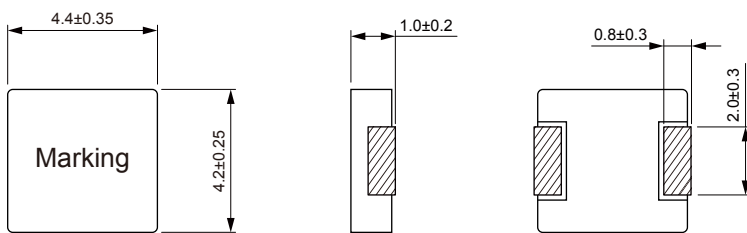
**FEATURES**

- 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: 3000pcs

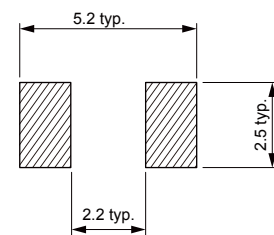
**APPLICATION**

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

**Dimensions: [mm]**



**Land Pattern: [mm]**



**Electrical Properties:**

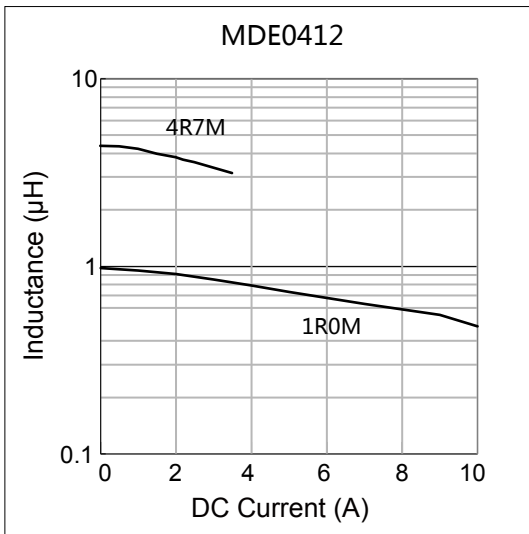
Part No	Inductance @ 100kHz/1V (μH)	Tolerance	DC Resistance Max. (mΩ)	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)
MDE0412-R15M	0.15	±20%	9.00	15.0	7.50
MDE0412-R22M	0.22	±20%	11.0	11.0	7.00
MDE0412-R33M	0.33	±20%	19.0	8.40	6.50
MDE0412-R47M	0.47	±20%	21.0	6.80	6.00
MDE0412-R68M	0.68	±20%	36.0	6.00	4.70
MDE0412-1R0M	1.00	±20%	47.0	5.50	4.50
MDE0412-1R5M	1.50	±20%	75.0	4.00	3.25
MDE0412-2R2M	2.20	±20%	83.5	3.00	2.75
MDE0412-4R7M	4.70	±20%	195	2.20	1.80

Saturation Current will cause L to drop approximately 30%

Temperature Rise Current: The actual value of DC current when the temperature rise is ΔT=40°C

Typical Electrical Characteristics:

Inductance vs DC Current Characteristics:



Temperature Rise vs DC Current Characteristics:

