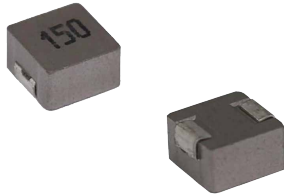


## MDE Series

### Molding Power Inductors

#### Size 0640



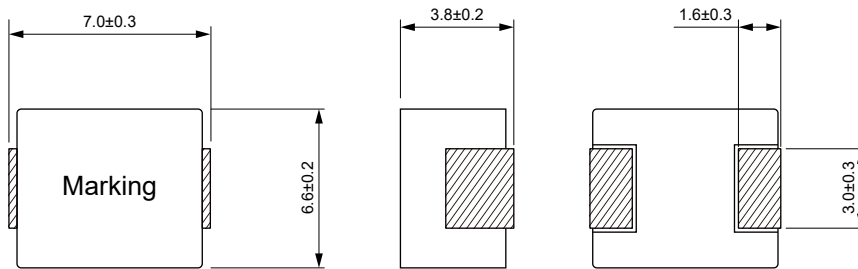
#### FEATURES

- 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: 1000pcs

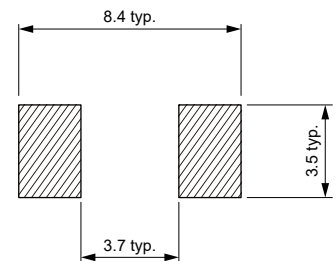
#### APPLICATION

- 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<br>@ 100kHz/1V<br>( $\mu$ H) | Tolerance | DC<br>Resistance<br>Max.<br>(m $\Omega$ ) | Saturation<br>Current<br>Typ.<br>(A) | Temperature<br>Rise Current<br>Typ.<br>(A) |
|--------------|-----------------------------------------|-----------|-------------------------------------------|--------------------------------------|--------------------------------------------|
| MDE0640-R68M | 0.68                                    | ±20%      | 4.80                                      | 19.0                                 | 17.0                                       |
| MDE0640-1R0M | 1.00                                    | ±20%      | 6.60                                      | 16.0                                 | 13.5                                       |
| MDE0640-1R5M | 1.50                                    | ±20%      | 10.0                                      | 12.5                                 | 12.4                                       |
| MDE0640-2R2M | 2.20                                    | ±20%      | 14.0                                      | 11.0                                 | 10.0                                       |
| MDE0640-3R3M | 3.30                                    | ±20%      | 20.0                                      | 9.50                                 | 8.50                                       |
| MDE0640-4R7M | 4.70                                    | ±20%      | 30.0                                      | 9.00                                 | 6.50                                       |
| MDE0640-6R8M | 6.80                                    | ±20%      | 45.0                                      | 6.50                                 | 5.50                                       |
| MDE0640-8R2M | 8.20                                    | ±20%      | 55.0                                      | 6.00                                 | 5.20                                       |
| MDE0640-100M | 10.0                                    | ±20%      | 65.0                                      | 6.00                                 | 4.80                                       |
| MDE0640-150M | 15.0                                    | ±20%      | 95.0                                      | 4.50                                 | 3.70                                       |
| MDE0640-220M | 22.0                                    | ±20%      | 125                                       | 4.00                                 | 3.30                                       |
| MDE0640-330M | 33.0                                    | ±20%      | 240                                       | 3.00                                 | 2.20                                       |
| MDE0640-470M | 47.0                                    | ±20%      | 320                                       | 2.50                                 | 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  $\Delta T=40^{\circ}\text{C}$