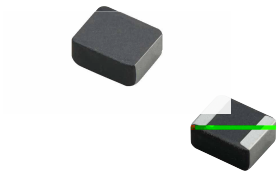
# MDE Series

Molding Power Inductors

Size 201610



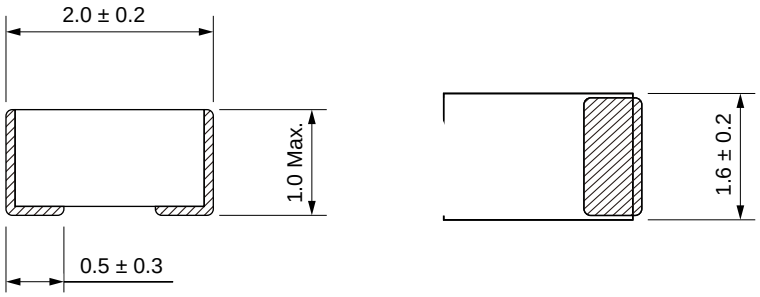
## FEATURES

- High satura on current realized by material proper es and structure design.
- Low DC resistance to achieve high conversion e ciency and lower temperature rising.
- Low Profile.
- Magne cally shielded structure to accomplish high resolu on in EMC protec on.
- Halogen free, Lead Free, RoHS Compliance.
- Opera ng temperature: -40 to +125 °C
- Quan ty: 3000PCS

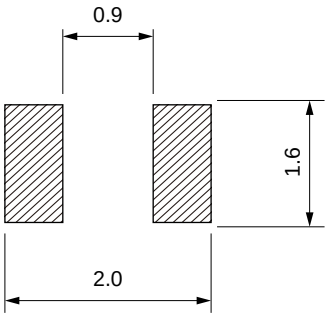
## APPLICATION

- Generic in portable DC to DC converter line.
- Smart phone, PAD
- DC/DC converter
- Thin-type power supply module.

## Dimensions: [mm]




## Land Pattern: [mm]

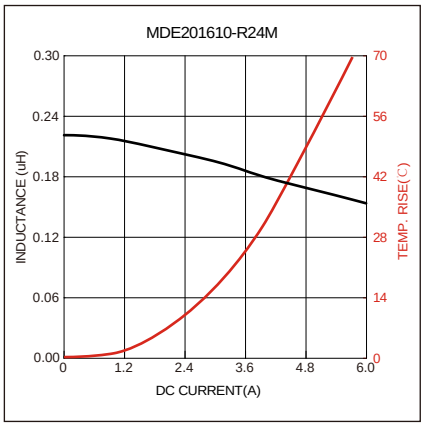


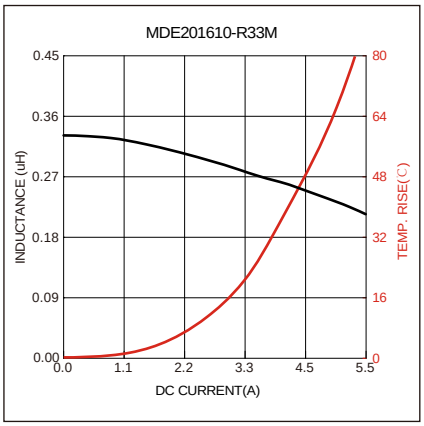

## Electrical Properties:

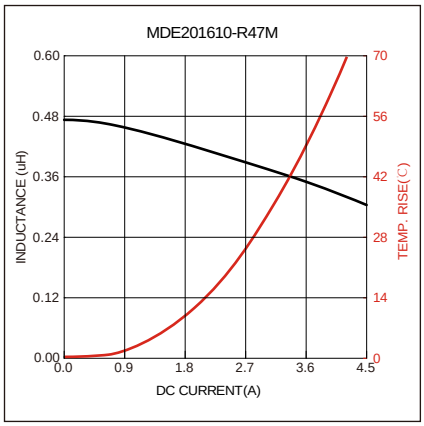
| | (μH) | | (mΩ) | (mΩ) | Satura on (A) | Satura on (A) | (A) | (A) |
|---|---|---|---|---|---|---|---|---|
| MDE201610-R24M | 0.24 | ±20% | 17 | 21 | 5.6 | 5.05 | 5.0 | 4.50 |
| MDE201610-R33M | 0.33 | ±20% | 24 | 29 | 5.0 | 4.50 | 4.1 | 3.69 |
| MDE201610-R47M | 0.47 | ±20% | 33 | 40 | 4.4 | 4.00 | 3.5 | 3.15 |
| MDE201610-R68M | 0.68 | ±20% | 41 | 49 | 3.7 | 3.33 | 3.4 | 3.06 |
| MDE201610-1R0M | 1.0 | ±20% | 60 | 69 | 2.9 | 2.61 | 2.6 | 2.26 |
| MDE201610-1R5M | 1.5 | ±20% | 114 | 129 | 2.5 | 2.25 | 2.0 | 1.81 |
| MDE201610-2R2M | 2.2 | ±20% | 135 | 150 | 1.9 | 1.71 | 1.7 | 1.50 |

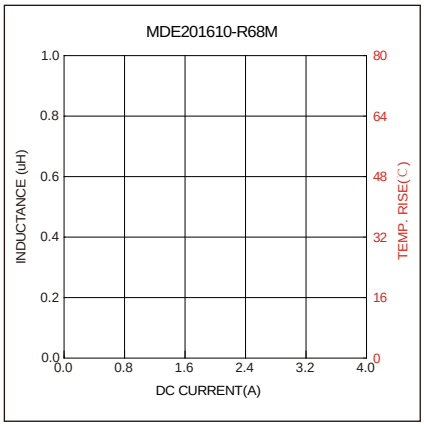
Temperature rising current will cause the coil temperature approximate ΔT40 °C
Satura on current will cause to drop approximately 30 %

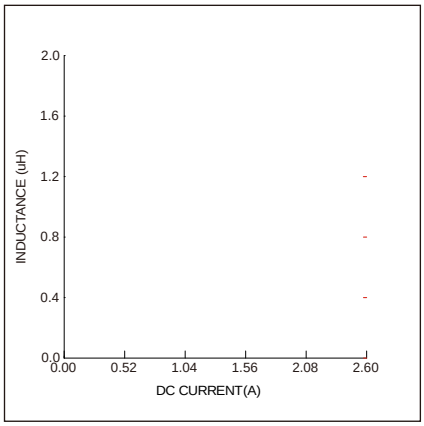
# Typical Electrical Characteristics:



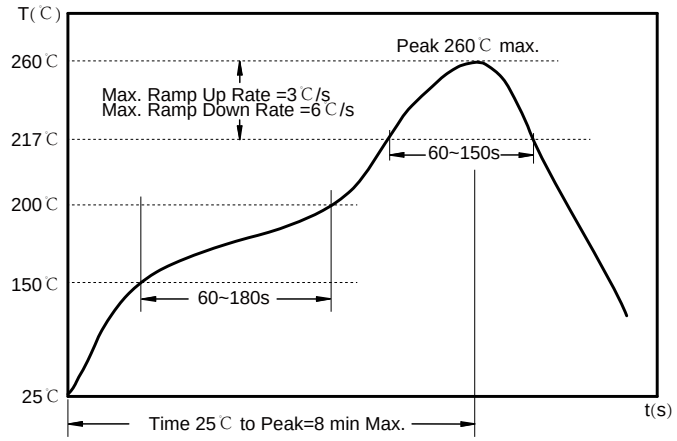



## Soldering Reflow:




Preheat condition: 150 ~200℃/ 60~180 sec.

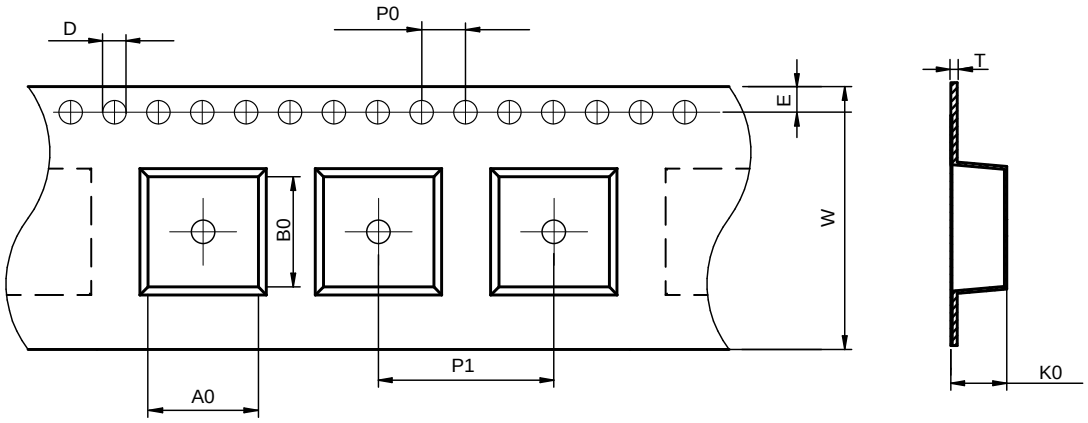
Allowed time above 217℃: 60~150 sec.

Max temperature: 260℃.

Time within 5 ℃ of actual Peak Temperature: 20-40 sec.

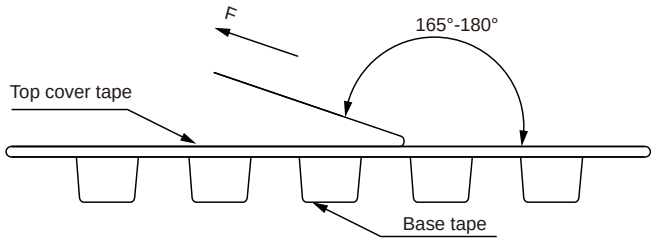
## Packaging Information:

### Tape Dimension:



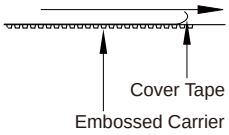

| Series | A0 (mm) | B0 (mm) | D (mm) | P0 (mm) | P1 (mm) | W (mm) | K0 (mm) | E (mm) | T (mm) |
|---|---|---|---|---|---|---|---|---|---|
| MDE201610 | 1.82±0.05 | 2.23±0.05 | 1.55±0.05 | 4.0±0.1 | 4.0±0.1 | 8.0±0.3 | 1.15±0.05 | 1.75±0.1 | 0.22±0.05 |

### Peel force of top cover tape:




The peel force of top cover tape shall be between 0.1 to 1.3 N

Reel Dimension：[mm]




Packaging Quantity: