

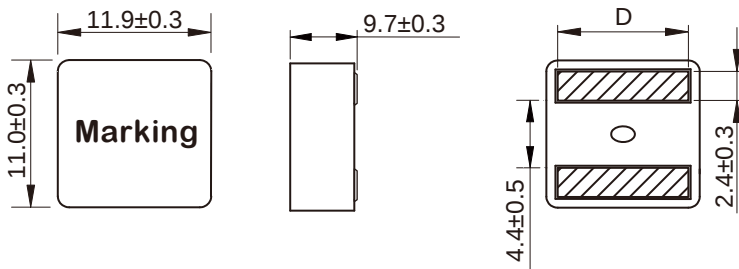
## Wire Wound Molded SMD Power Inductors Size 1010



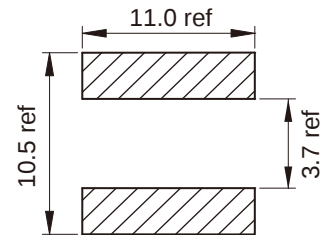
- Soft saturation
- High current, low DCR, high efficiency
- Very low acoustic noise and very low leakage flux noise
- High reliability
- 100% Lead(Pb)-Free and RoHS compliant
- Operating temperature -55~+125 °C (Including self - temperature rise)
- Quantity: 300pcs

- Note PC power system, incl. IMVP-6
- DC/DC converter

Dimensions: [mm]



Land Pattern: [mm]



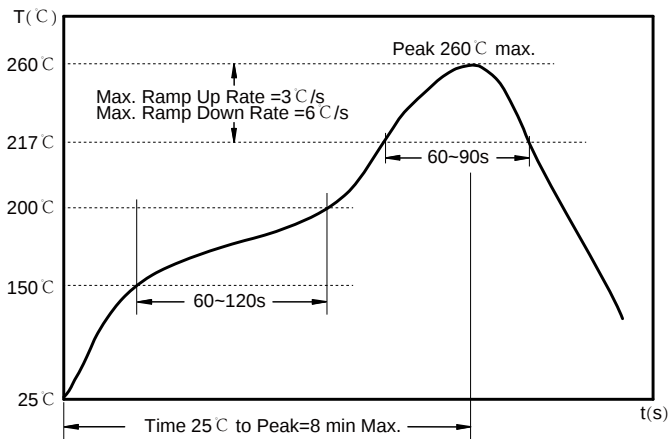
Electrical Properties:

| Part No       | Inductance<br>@ 100KHz/0.1V<br>(μH) | Tolerance | Saturation<br>Current<br>Typ.<br>(A) | Saturation<br>Current<br>Max.<br>(A) | Temperature<br>Rise Current<br>Typ.<br>(A) | DC<br>Resistance<br>Max.<br>(mΩ) | D<br>(mm) |
|---------------|-------------------------------------|-----------|--------------------------------------|--------------------------------------|--------------------------------------------|----------------------------------|-----------|
| MDTE1010-2R2M | 2.20                                | ±20%      | 34.0                                 | 29.0                                 | 32.0                                       | 2.8                              | 9.3±0.5   |
| MDTE1010-3R3M | 3.30                                | ±20%      | 27.4                                 | 23.4                                 | 25.0                                       | 4.1                              | 9.3±0.5   |
| MDTE1010-4R7M | 4.70                                | ±20%      | 25.4                                 | 21.4                                 | 24.0                                       | 5.7                              | 9.3±0.5   |
| MDTE1010-5R6M | 5.60                                | ±20%      | 23.6                                 | 19.6                                 | 21.2                                       | 7.2                              | 9.3±0.5   |
| MDTE1010-6R8M | 6.80                                | ±20%      | 21.8                                 | 18.5                                 | 18.5                                       | 8.9                              | 9.0±0.5   |
| MDTE1010-8R2M | 8.20                                | ±20%      | 18.3                                 | 16.3                                 | 17.1                                       | 12.4                             | 9.0±0.5   |
| MDTE1010-100M | 10.0                                | ±20%      | 17.5                                 | 14.6                                 | 15.5                                       | 13.75                            | 9.0±0.5   |
| MDTE1010-150M | 15.0                                | ±20%      | 15.5                                 | 12.5                                 | 13.8                                       | 19.30                            | 9.0±0.5   |

Saturation Current will cause L to drop approximately 30%

Temperature Rise Current: The actual value of DC current when the temperature rise is  $\Delta T=40^{\circ}\text{C}$

## Soldering Reflow:



Preheat condition: 150 ~200 °C / 60~120 sec.

Allowed time above 217 °C : 60~90 sec.

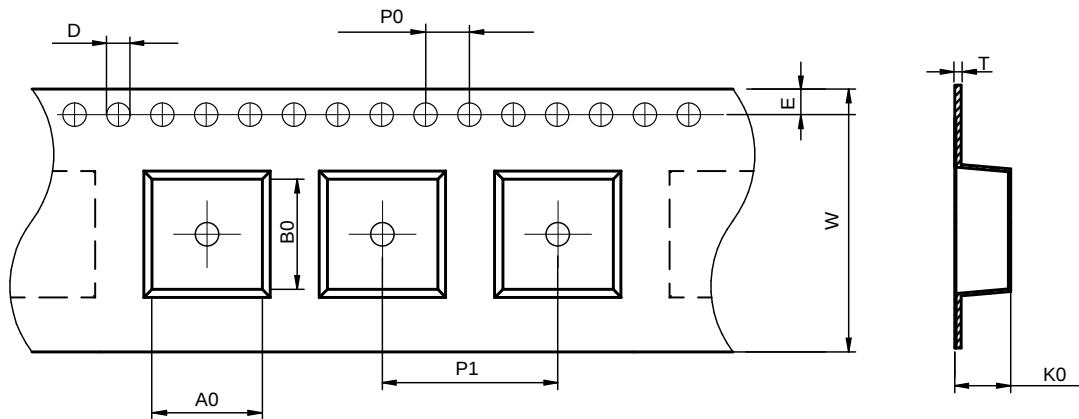
Max temperature: 260 °C .

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

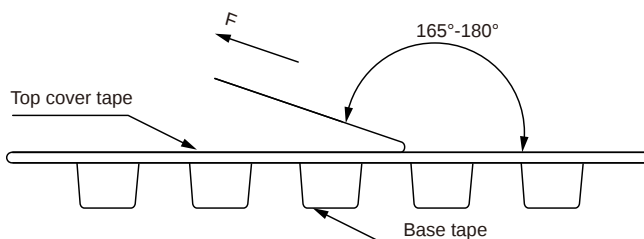
## Packaging Information:

### Tape Dimension :



| Series   | A0<br>(mm) | B0<br>(mm) | D<br>(mm) | P0<br>(mm) | P1<br>(mm) | W<br>(mm) | K0<br>(mm) | E<br>(mm) | T<br>(mm) |
|----------|------------|------------|-----------|------------|------------|-----------|------------|-----------|-----------|
| MDTE1010 | 12.4±0.1   | 11.5±0.1   | 1.5±0.1   | 4.0±0.1    | 16.0±0.1   | 24.0±0.3  | 10.3±0.1   | 1.75±0.1  | 0.35±0.05 |

### Peel force of top cover tape:



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

### Product Marking:

| Marking | Printing (Inductance) |
|---------|-----------------------|
|---------|-----------------------|

Reel Dimension: [mm]

Packaging Quantity: