

## MDTE Series

Wire Wound Molded SMD Power Inductors

Size 5030



### FEATURES

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M

C

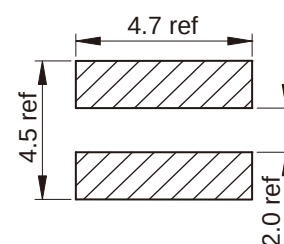
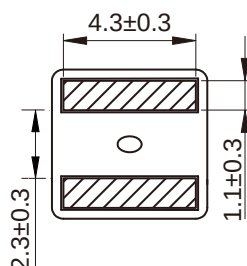
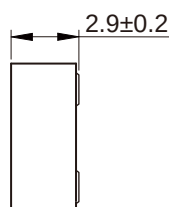
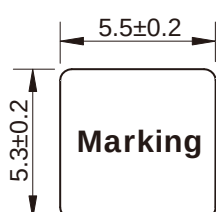
### APPLICATION

- 
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L

Dimensions: [mm]

Land Pattern: [mm]



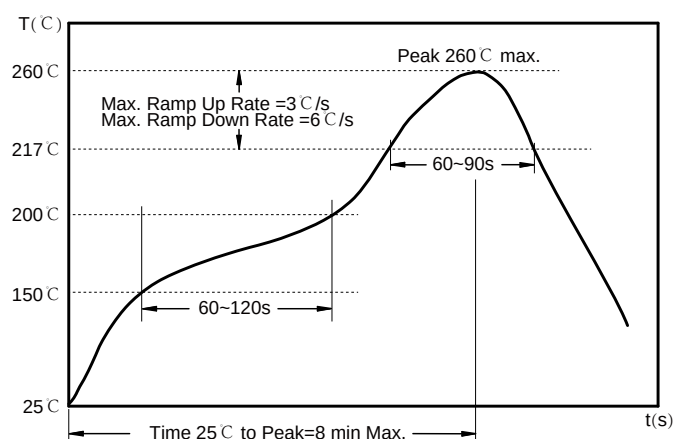
Electrical Properties:

| Part No | Inductance<br>@ 100KHz/0.1V | Tolerance | Current<br>Typ. | Current<br>Max. | Temperature<br>Rise Current<br>Typ. | DC<br>Resistance<br>Max. |
|---------|-----------------------------|-----------|-----------------|-----------------|-------------------------------------|--------------------------|
|         |                             |           |                 |                 |                                     |                          |
|         |                             |           |                 |                 |                                     |                          |
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|         |                             |           |                 |                 |                                     |                          |
|         |                             |           |                 |                 |                                     |                          |

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.

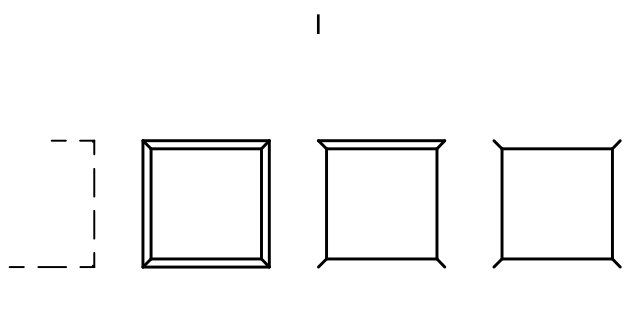
Max temperature: 260 °C.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

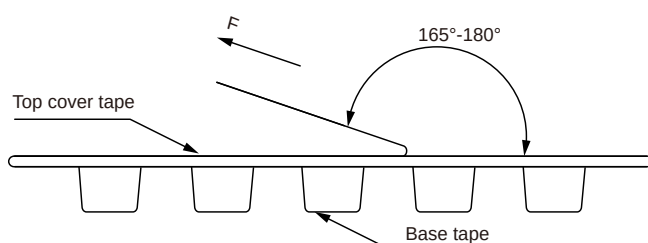
## Packaging Information:

### 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) |
|----------|------------|------------|-----------|------------|------------|-----------|------------|-----------|-----------|
| MDTE5030 | 6.0±0.1    | 5.7±0.1    | 1.5±0.1   | 4.0±0.1    | 8.0±0.1    | 16.0±0.3  | 3.3±0.1    | 1.75±0.1  | 0.35±0.05 |

### Peel force of top cover tape:

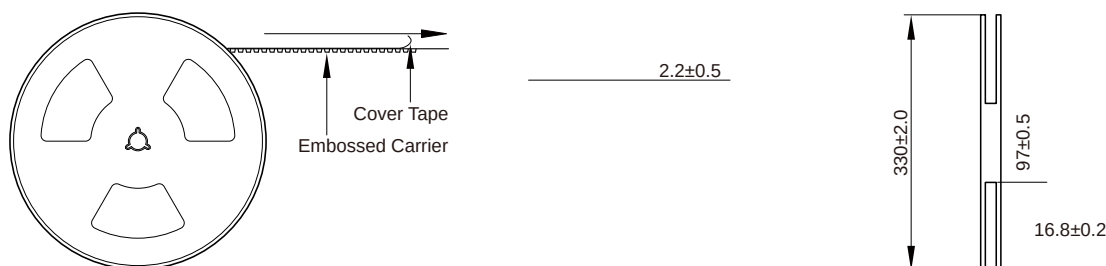


The peel force of top cover tape shall be between 0.1 to 1.3 N

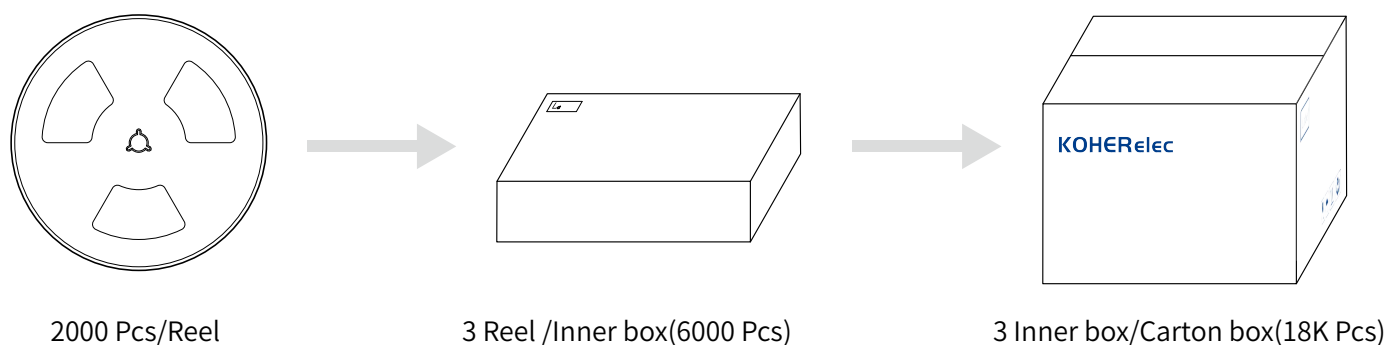
### Product Marking:

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

## Reel Dimension: [mm]



## Packaging Quantity:



## Cautions and Warnings:

### Storage Conditions:

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max). If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

### Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does. As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.