

# MDTA Series

## Flat Wire Molded Inductor

### Size 6050



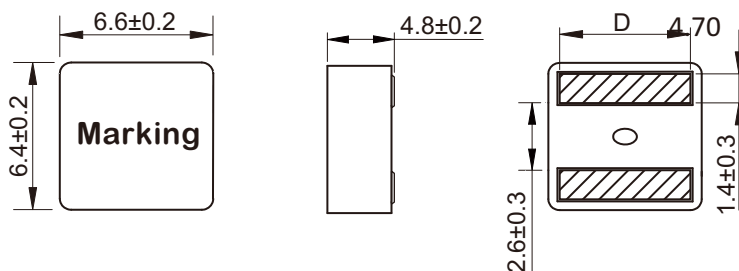
#### FEATURES

- Flat wire coil for low copper losses
- Composite core material allows high saturation currents
- Very low acoustic noise and very low leakage flux noise
- High current capability and handles high transient current spikes
- AEC-Q200 qualified
- Operating temperature -55 to +155 °C (Including self - temperature rise)
- Quantity: 800pcs

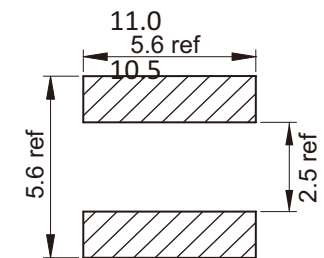
#### APPLICATION

- DC/DC converters for entertainment/navigation systems
- Noise suppression for motors: windshield wipers / power seats/ power mirrors / heating and ventilation blowers / HID lighting
- LED drivers

Dimensions: [mm]



Land Pattern: [mm]



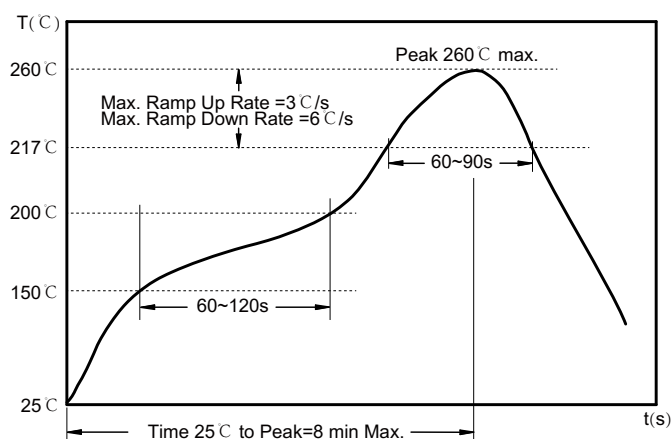
Electrical Properties:

| Inductance (mH) | DC Resistance (mΩ) | Q Factor |
|-----------------|--------------------|----------|
| 16.0            | 4.18               | 5.3±0.3  |
| 15.0            | 4.52               | 5.3±0.3  |
| 14.0            | 5.83               | 5.3±0.3  |
| 13.0            | 6.30               | 5.3±0.3  |
| 12.0            | 7.10               | 5.3±0.3  |
| 10.0            | 8.50               | 5.2±0.3  |
| 8.5             | 12.5               | 5.2±0.3  |
| 7.0             | 16.2               | 5.2±0.3  |
| 6.5             | 18.4               | 5.2±0.3  |

Saturation Current will cause L to drop approximately 30%

Temperature Rise Current that causes the specified temperature rise from 25°C ambient.

## 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.

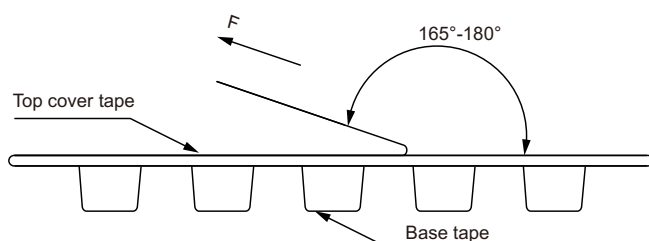
Allowed Reflow time: 2x max.

## 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) |
|----------|------------|------------|-----------|------------|------------|-----------|------------|-----------|-----------|
| MDTA6050 | 7.0±0.1    | 6.8±0.1    | 1.5±0.1   | 4.0±0.1    | 12.0±0.1   | 16.0±0.3  | 5.3±0.1    | 1.75±0.1  | 0.40±0.05 |

### Peel force of top cover tape:

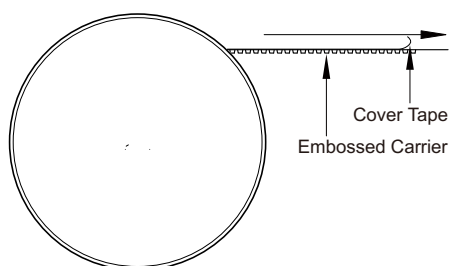


The peel force of top cover tape shall be between 0.1 to 1.3 N

### Product Marking:

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

Reel Dimension: [mm]



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Packaging Quantity: