# MDTE Series

Wire Wound Molded SMD Power Inductors

Size 8080



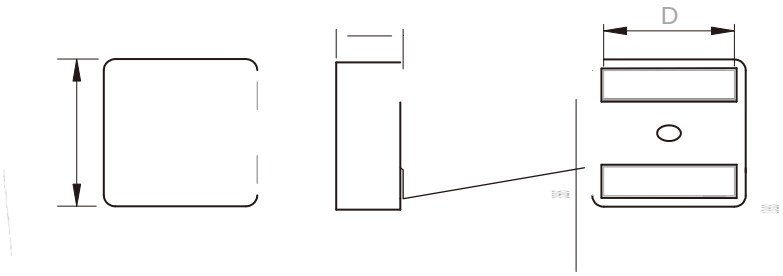

## FEATURES

- So satura on
- High current,low DCR,high e ciency
- Very low acous c noise and very low leakage flux noise
- High reliability
- 100% Lead(Pb)-Free and RoHS compliant
- Opera ng temperature -55~+125℃(Including self - temperature rise)
- Quan ty: 450pcs

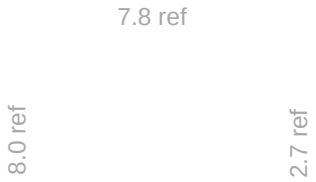
## APPLICATION

- Note PC power sys
- DC/DC converter

## Dimensions: [mm]




## Land Pattern: [mm]




## Electrical Properties:

| Part No | Inductance @ 100KHz/0.1V (μH) | Tolerance | Satura on Current Typ. (A) | Satura on Current Max. (A) | Temperature Rise Current Typ. (A) | DC Resistance Max. (mΩ) | D (mm) |
|---|---|---|---|---|---|---|---|
| MDTE8080-1R8M | 1.80 | ±20% | 28.0 | 24.0 | 24.0 | 4.0 | 7.2±0.3 |
| MDTE8080-2R2M | 2.20 | ±20% | 25.0 | 22.0 | 21.5 | 4.3 | 7.2±0.3 |
| MDTE8080-3R3M | 3.30 | ±20% | 23.0 | 20.0 | 18.0 | 7.3 | 6.9±0.3 |
| MDTE8080-4R7M | 4.70 | ±20% | 19.0 | 17.0 | 14.6 | 9.8 | 6.9±0.3 |
| MDTE8080-6R8M | 6.80 | ±20% | 14.5 | 12.5 | 11.3 | 14.3 | 6.9±0.3 |
| MDTE8080-100M | 10.0 | ±20% | 11.0 | 10.0 | 8.7 | 22.9 | 6.9±0.3 |

Saturation Current will cause L to drop approximately 30%

Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

## Soldering Reflow:

Preheat condition: 150 ~200℃/ 60~120 sec.

Allowed time above 217℃: 60~90 sec.

Max temperature: 260℃.

Max time at max temperature: 10 sec.

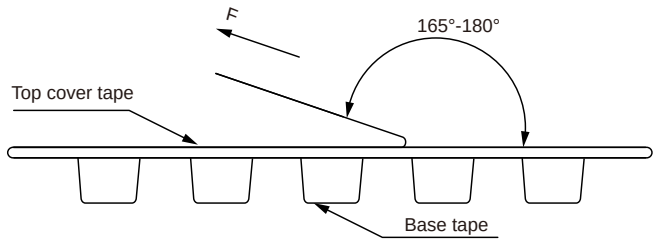
Allowed Reflow time: 2x max.

## Packaging Information:

Tape Dimension:

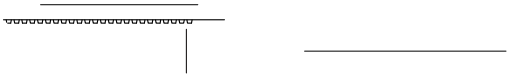
| Series | A0 (mm) | B0 (mm) | D (mm) | P0 (mm) | P1 (mm) | W (mm) | K0 (mm) | E (mm) | T (mm) |
|---|---|---|---|---|---|---|---|---|---|
| MDTE8080 | 9.4±0.1 | 8.9±0.1 | 1.5±0.1 | 4.0±0.1 | 16.0±0.1 | 24.0±0.3 | 8.5±0.1 | 1.75±0.1 | 0.35±0.05 |

Peel force of top cover tape:




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

Reel Dimension：[mm]



Packaging Quantity: