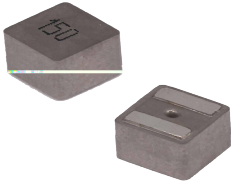


## MDTE Series

### Wire Wound Molded SMD Power Inductors Size 1580



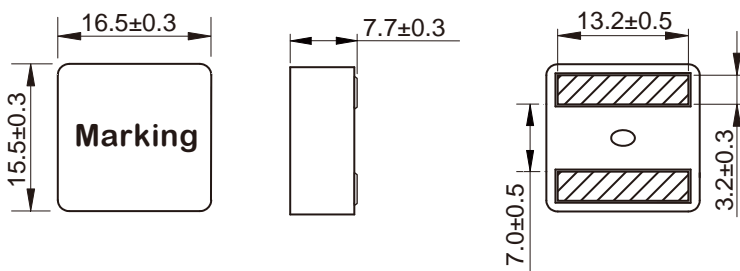
#### FEATURES

- 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  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$  (Including self - temperature rise)
- Quantity: 200pcs

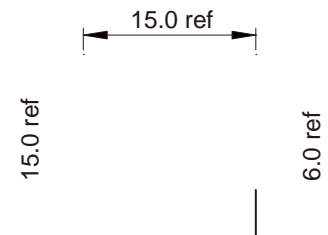
#### APPLICATION

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

#### Dimensions: [mm]



#### Land Pattern: [mm]



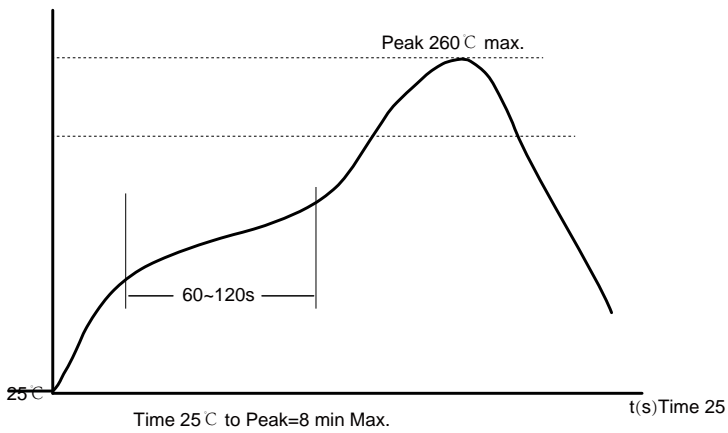
#### Electrical Properties:

Part No	Inductance @ 100KHz/0.1V ( $\mu\text{H}$ )	Tolerance	Saturation Current Typ. (A)	Saturation Current Max. (A)	Temperature Rise Current Typ. (A)	DC Resistance Max. (m $\Omega$ )
MDTE1580-2R0M	2.0	$\pm 20\%$	57.0	52.0	40.0	2.21
MDTE1580-2R2M	2.2	$\pm 20\%$	55.0	49.0	37.0	2.48
MDTE1580-3R0M	3.0	$\pm 20\%$	46.0	41.0	34.5	3.00
MDTE1580-4R2M	4.2	$\pm 20\%$	38.0	33.0	27.0	4.68
MDTE1580-5R3M	5.3	$\pm 20\%$	35.0	31.0	26.0	5.34
MDTE1580-6R2M	6.2	$\pm 20\%$	34.0	31.0	23.0	6.50
MDTE1580-7R2M	7.2	$\pm 20\%$	32.0	29.0	21.0	7.20
MDTE1580-8R2M	8.2	$\pm 20\%$	28.0	25.0	19.0	7.92
MDTE1580-100M		$\pm 20\%$	24.0	21.0	16.0	9.60
MDTE1580-150M	15	$\pm 20\%$	21.0	18.0	13.0	15.0
MDTE1580-220M	22	$\pm 20\%$	19.0	16.0	12.0	23.2

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.

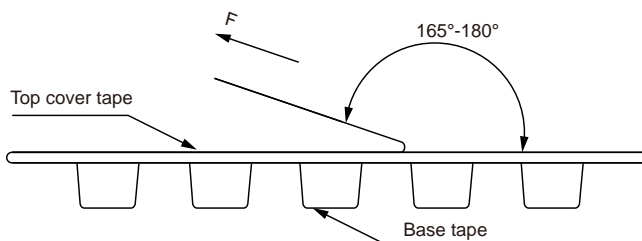
Allowed Reflow time: 2x max.

## Packaging Information:

### Tape Dimension:

Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTE1580	17.0±0.1	16.0±0.1	1.5±0.1	4.0±0.1	24.0±0.1	32.0±0.3	8.5±0.1	1.75±0.1	0.5±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: