

MDTE Series

Wire Wound Molded SMD Power Inductors

Size 1030



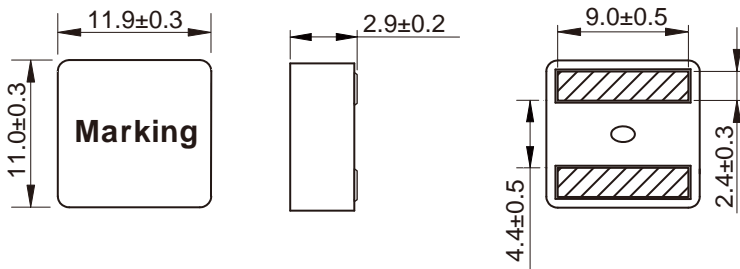
FEATURES

- So 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: 1000pcs

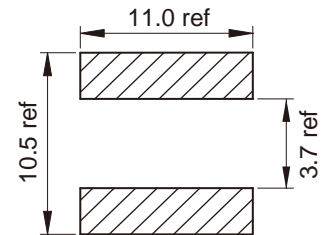
APPLICATION

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

Dimensions: [mm]



Land Pattern: [mm]



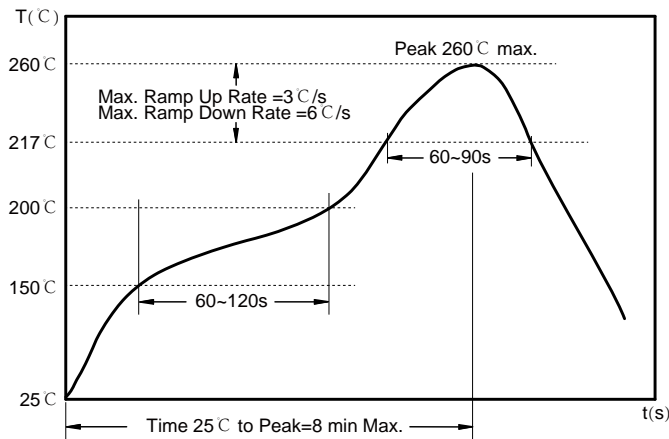
Electrical Properties:

Part No	Inductance @ 100KHz/0.1V (μ H)	Tolerance	Saturation Current Typ. (A)	Saturation Current Max. (A)	Temperature Rise Current Typ. (A)	DC Resistance Max. (m Ω)
MDTE1030-R28M	0.28	$\pm 20\%$	65.0	58.0	35.0	1.60
MDTE1030-R56M	0.56	$\pm 20\%$	44.0	39.0	32.0	2.75
MDTE1030-R82M	0.82	$\pm 20\%$	38.0	32.0	25.0	4.10
MDTE1030-R90M	0.90	$\pm 20\%$	36.0	31.0	24.0	4.20
MDTE1030-1R0M	1.00	$\pm 20\%$	35.0	30.0	23.0	4.95
MDTE1030-1R5M	1.50	$\pm 20\%$	30.0	25.0	18.0	6.60

Saturation Current will cause L to drop approximately 30%

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

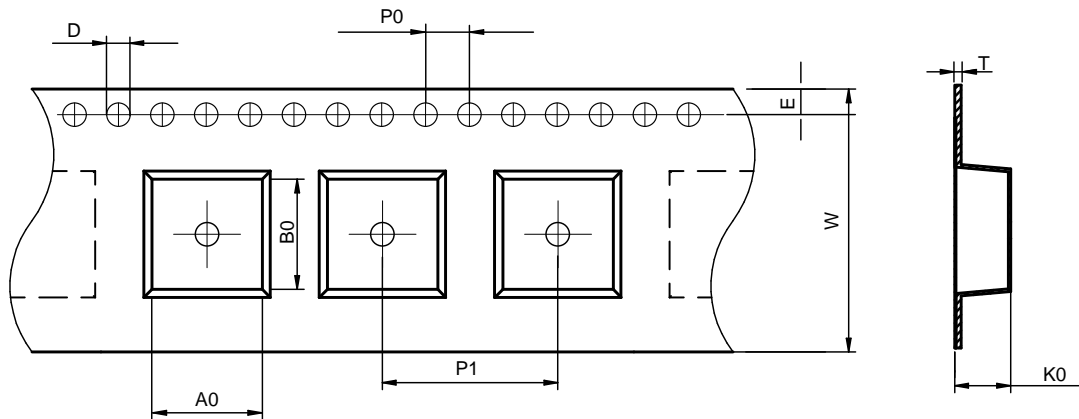
Soldering Reflow:



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.

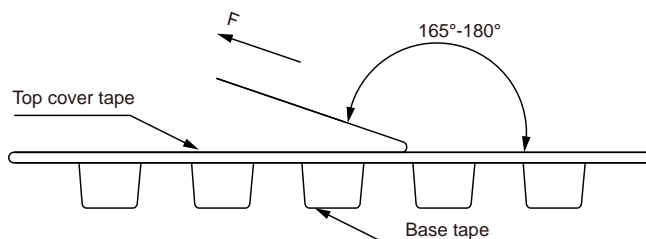
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTE1030	12.4±0.1	11.5±0.1	1.5±0.1	4.0±0.1	16.0±0.1	24.0±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)
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Reel Dimension: [mm]



Packaging Quantity: