

MDTE Series

Wire Wound Molded SMD Power Inductors

Size 4020



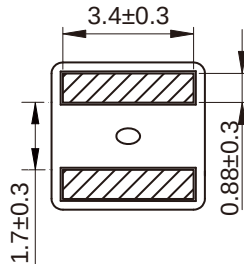
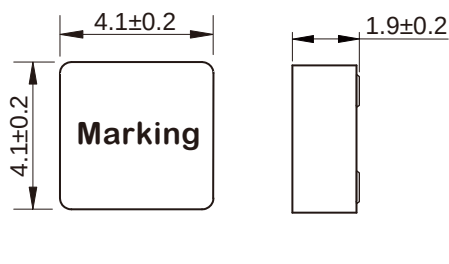
FEATURES

- 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: 3000pcs

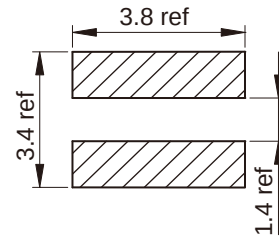
APPLICATION

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

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

Part No	Inductance @ 100KHz/0.1V	Tolerance	Current Typ.	Current Max.	Temperature Rise Current Typ.	DC Resistance Max.
MDTE4020-R10M	0.10	±20%	38.0	33.0	18.0	2.42
MDTE4020-R22M	0.22	±20%	19.5	18.8	16.8	4.60
MDTE4020-R36M	0.36	±20%	17.0	15.0	14.5	6.30
MDTE4020-R40M	0.40	±20%	15.5	13.5	14.0	7.73
MDTE4020-R47M	0.47	±20%	14.5	13.0	12.5	8.58
MDTE4020-R56M	0.56	±20%	14.0	12.6	12.0	9.30
MDTE4020-R60M	0.60	±20%	13.7	12.3	11.7	9.52
MDTE4020-R72M	0.72	±20%	12.0	10.6	10.5	11.6
MDTE4020-1R0M	1.00	±20%	9.6	8.8	9.6	14.6
MDTE4020-1R2M	1.20	±20%	9.0	7.8	9.0	17.9
MDTE4020-1R5M	1.50	±20%	8.0	7.4	7.6	23.5
MDTE4020-1R8M	1.80	±20%	7.5	7.0	7.0	28.0
MDTE4020-2R2M	2.20	±20%	6.5	6.0	5.6	38.7

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℃ / 60~120 sec.

Allowed time above 217℃ : 60~90 sec.

Max temperature: 260℃ .

Max time at max temperature: 10 sec.

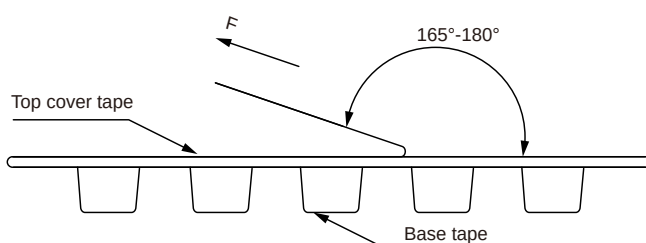
Allowed Reflow time: 2x max.

Packaging Information:

Tape Dimension:

Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTE4020	4.5±0.1	4.5±0.1	1.5±0.1	4.0±0.1	8.0±0.1	12.0±0.3	2.3±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

Reel Dimension: [mm]



Packaging Quantity: