MDTE Series

Wire Wound Molded SMD Power Inductors

Size 5030

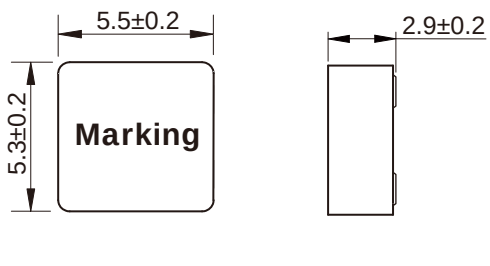
FEATURES

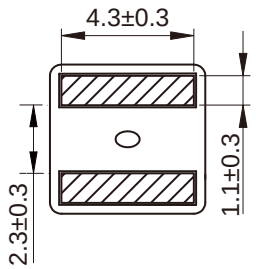
- So satura on
- High current,low DCR,high e ciency
- Very low acous c noise and very low leakage flux noise
- High reliability
- 100% Lead(Pb)-Free and RoHS compliant
- Opera ng temperature -55~+125℃(Including self - temperature rise)
- Quan ty: 2000pcs

APPLICATION

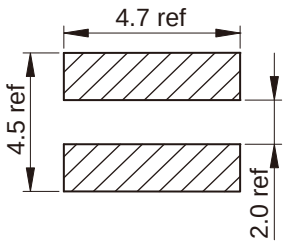
- Note PC power system,incl. IMVP-6
- DC/DC converter

Dimensions: [mm]





Land Pattern: [mm]



Electrical Properties:

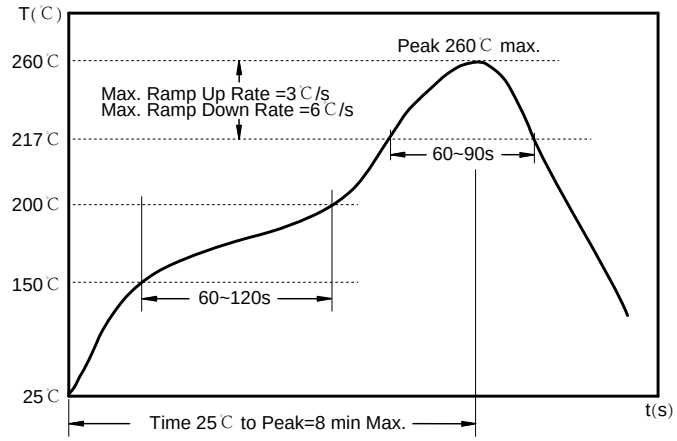
Part No	Inductance @ 100KHz/0.1V	Tolerance	Current Typ.	Current Max.	Temperature Rise Current Typ.	DC Resistance Max.
MDTE5030-R15M	0.15	±20%	36.0	32.5	22.2	2.31
MDTE5030-R16M	0.16	±20%	35.0	32.0	22.2	2.33
MDTE5030-R33M	0.33	±20%	28.0	26.0	19.2	3.52
MDTE5030-R47M	0.47	±20%	26.0	24.0	18.4	4.13
MDTE5030-R56M	0.56	±20%	22.2	20.2	17.7	4.52
MDTE5030-R60M	0.60	±20%	22.0	20.0	17.7	4.52
MDTE5030-R80M	0.80	±20%	20.0	18.0	13.1	5.65
MDTE5030-R82M	0.82	±20%	19.7	17.6	12.9	5.78
MDTE5030-1R0M	1.00	±20%	16.5	14.3	12.2	7.60
MDTE5030-1R2M	1.20	±20%	15.0	13.5	11.0	9.70
MDTE5030-1R5M	1.50	±20%	14.0	12.5	10.5	11. в
MDTE5030-1R8M	1.80	±20%	12.3	11.3	10.1	2
MDTE5030-2R2M	2.20	±20%	10.0	9.00	9.70	
MDTE5030-3R3M	3.30	±20%	9.50	8.70	8.10	
MDTE5030-4R7M	4.70	±20%	8.20	7.00	5.90	

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

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Soldering Reflow:



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

Allowed time above 217℃: 60~90 sec.

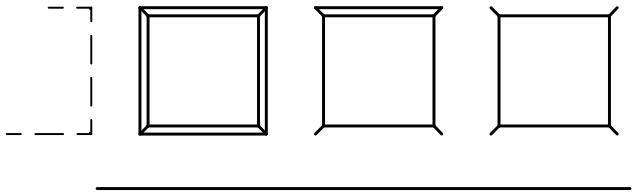
Max temperature: 260℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

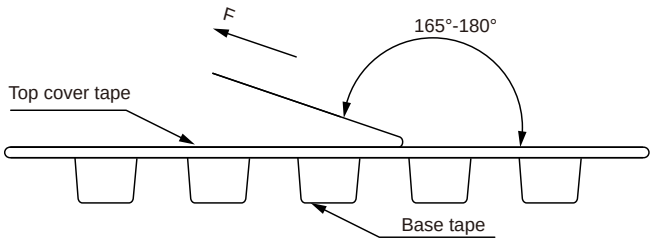
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTE5030	6.0±0.1	5.7±0.1	1.5±0.1	4.0±0.1	8.0±0.1	16.0±0.3	3.3±0.1	1.75±0.1	0.35±0.05

Peel force of top cover tape:

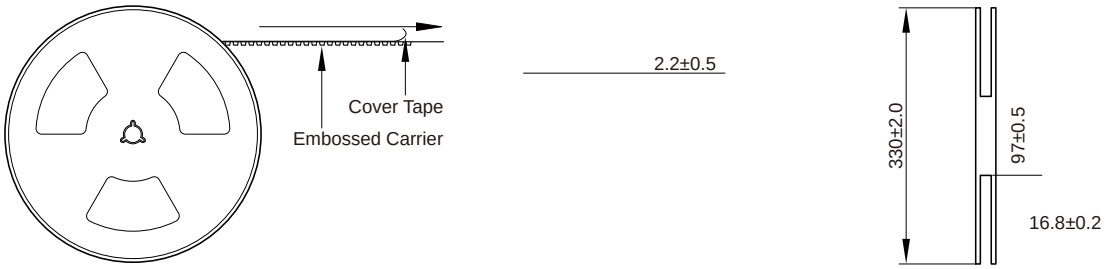


The peel force of top cover tape shall be between 0.1 to 1.3 N

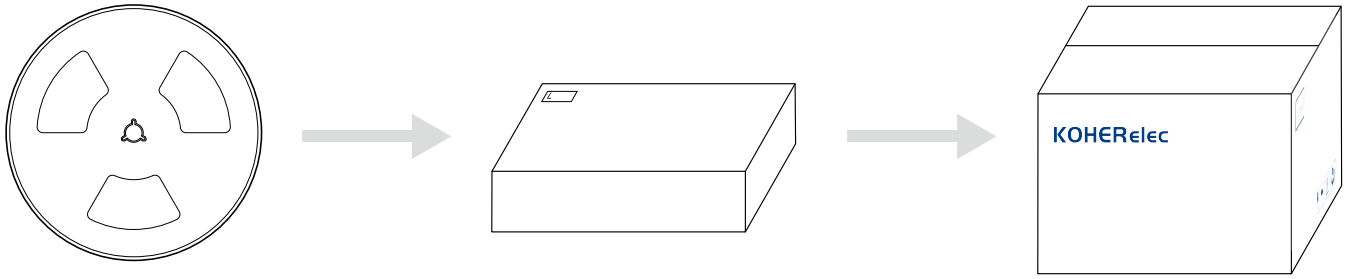
Product Marking:

Marking	Printing (Inductance)

Reel Dimension：[mm]



Packaging Quantity:



2000 Pcs/Reel

3 Reel /Inner box(6000 Pcs)

3 Inner box/Carton box(18K Pcs)

Cautions and Warnings:

Storage Conditions：

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max).If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components.The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does.As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.