MDTE Series

Wire Wound Molded SMD Power Inductors

Size 4030



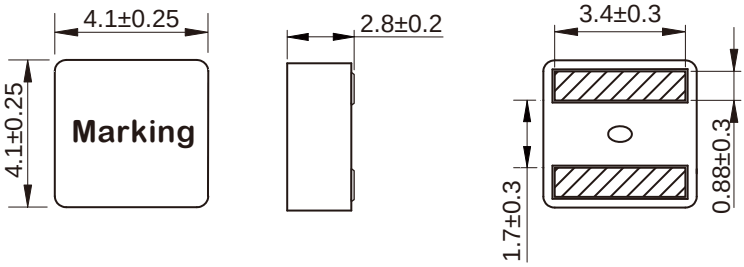
FEATURES

- 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

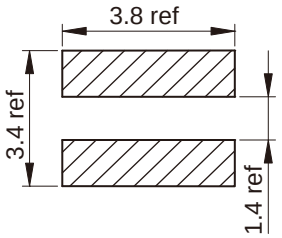
APPLICATION

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

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

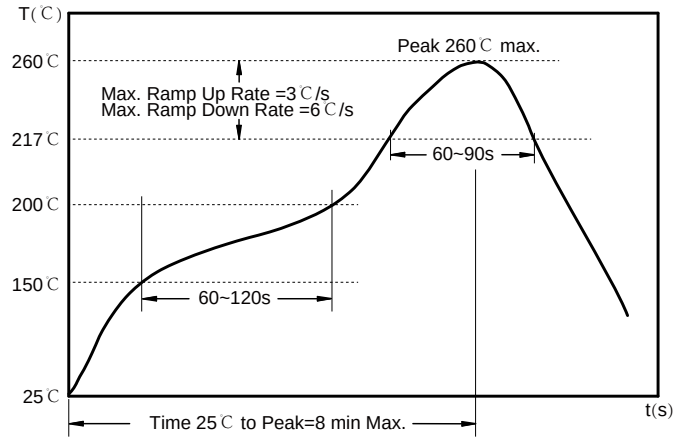
	(μH)		Satura on (A)	Satura on (A)	(A)	(mΩ)
MDTE4030-R47M	0.47	±20%	17.0	15.0	14.0	7.26
MDTE4030-R90M	0.90	±20%	10.0	9.00	11.2	10.1
MDTE4030-1R0M	1.00	±20%	9.80	9.20	11.0	10.1
MDTE4030-1R2M	1.20	±20%	9.20	8.70	9.80	11.5
MDTE4030-1R5M	1.50	±20%	8.00	7.00	9.00	13.2
MDTE4030-2R2M	2.20	±20%	7.00	6.10	7.80	22.6
MDTE4030-3R3M	3.30	±20%	6.20	5.30	6.60	28.6
MDTE4030-4R7M	4.70	±20%	4.50	4.00	5.10	44.1
MDTE4030-6R8M	6.80	±20%	3.60	3.00	3.90	74.1

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.

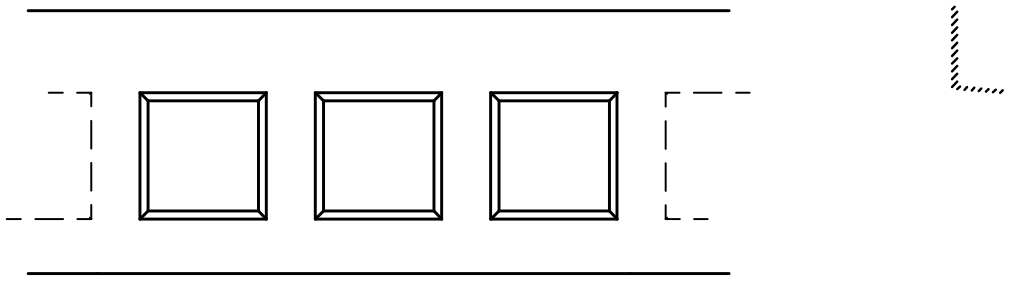
Max temperature: 260℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

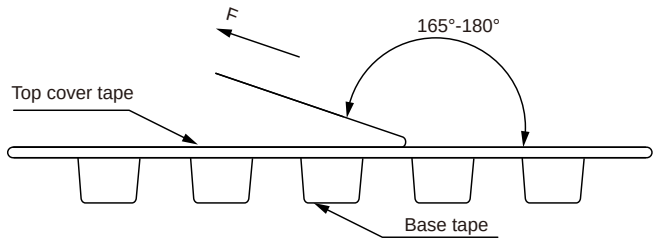
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTE4030	4.5 ± 0.1	4.5 ± 0.1	1.5 ± 0.1	4.0 ± 0.1	8.0 ± 0.1	12.0 ± 0.3	3.3 ± 0.1	1.75 ± 0.1	0.35 ± 0.05

Peel force of top cover tape:

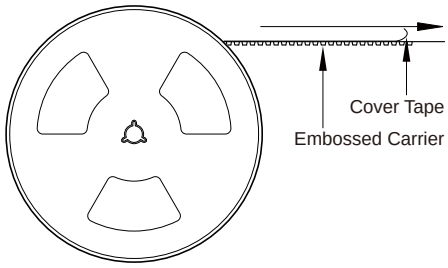


The peel force of top cover tape shall be between 0.1 to 1.3 N

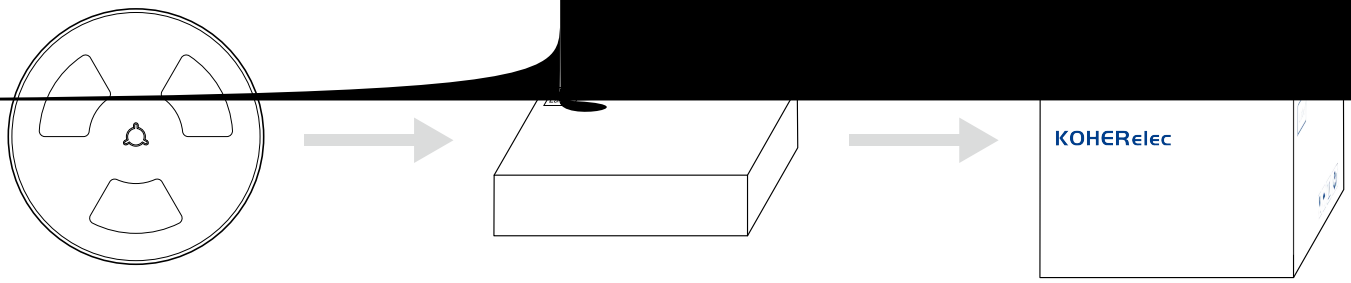
Product Marking:

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.