MDTA Series

Flat Wire Molded Inductor

Size 4030

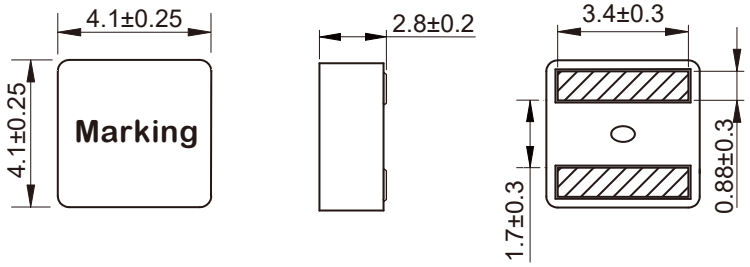
FEATURES

- Flat wire coil for low copper losses
- Composoite core material allows high saturation currents
- Very low acoustic noise and very low leakage flux noise
- High current capability and handles high transient current spikes
- AEC-Q200 qualified
- Operating temperature -55 to +155 ℃ (Including self - temperature rise)
- Quantity: 2000pcs

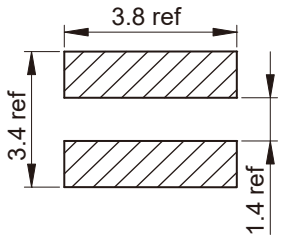
APPLICATION

- DC/DC converters for entertainment/navigation systems
  Noise suppression for motors: windshield wipers / power seats/ power mirrors / heating and ventilation blowers / HID lighting
- LED drivers

Dimensions: [mm]



Land Pattern: [mm]

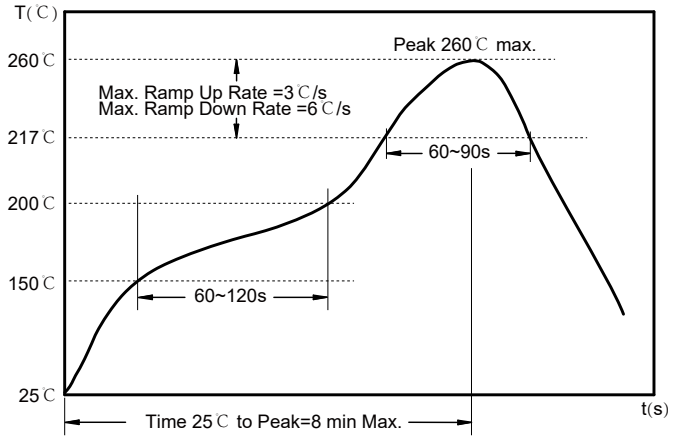


Electrical Properties:

Part No	L@100KHz /0.1V (μH)	Tolerance	I_{SAT} Typ. (A)	I_R (A)		R_{DC} Max. (mΩ)
				20°C rise	40°C rise	
MDTA4030-R47M	0.47	±20%	17.0	10.0	14.0	7.26
MDTA4030-1R0M	1.00	±20%	9.80	8.0	11.0	10.1
MDTA4030-1R5M	1.50	±20%	8.00	7.0	9.00	13.2
MDTA4030-2R2M	2.20	±20%	7.00	6.0	7.80	22.6
MDTA4030-3R3M	3.30	±20%	6.20	5.0	6.60	28.6

Saturation Current will cause L to drop approximately 30%
Temperature Rise Current that causes the specified temperature rise from 25°C ambient.

Soldering Reflow:



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

Allowed time above 217℃: 60~90 sec.

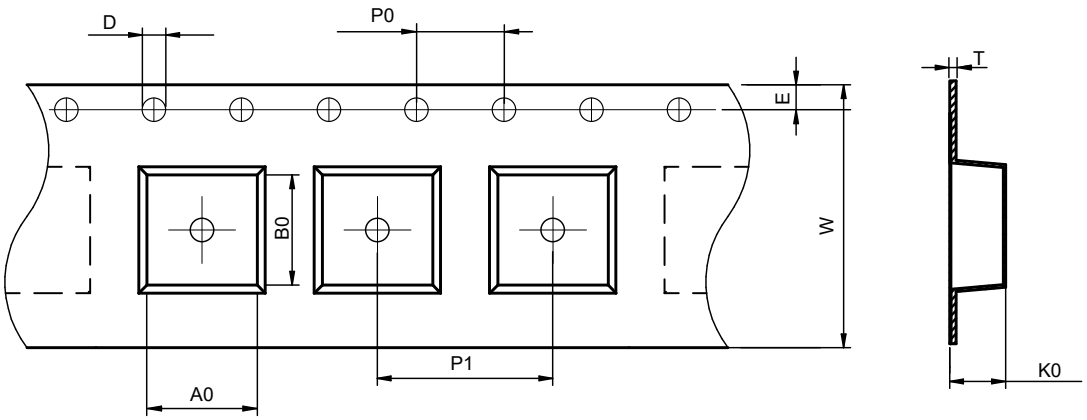
Max temperature: 260℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

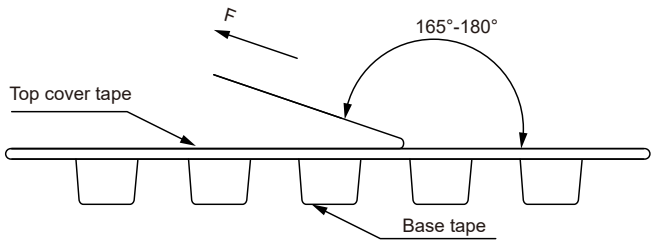
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTA4030	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:

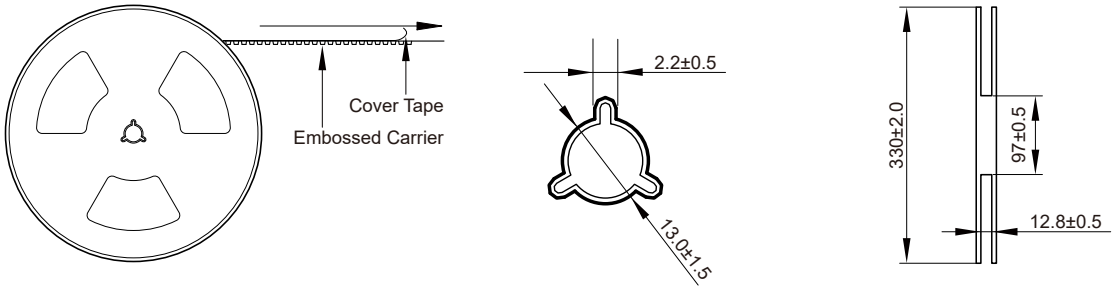


The peel force of top cover tape shall be between 0.1 to 1.3 N

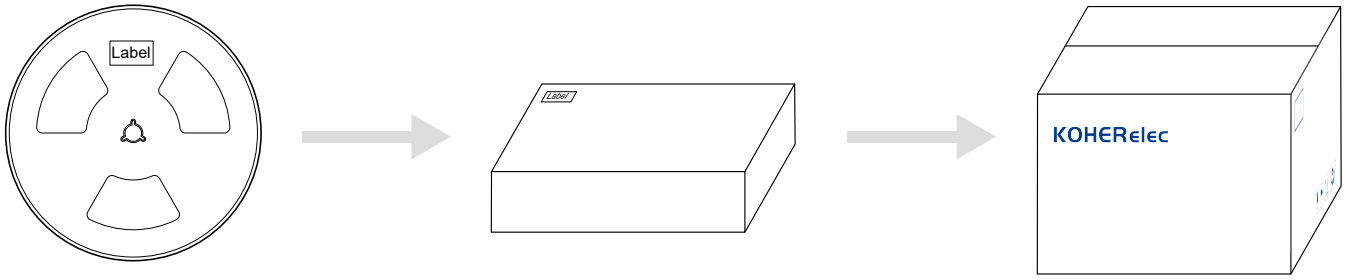
Product Marking:

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.The warranty period is one year.
- 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.