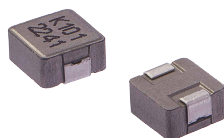


MDA HT Series

SMD Low Profile High Current Molded Inductor

Size 5030



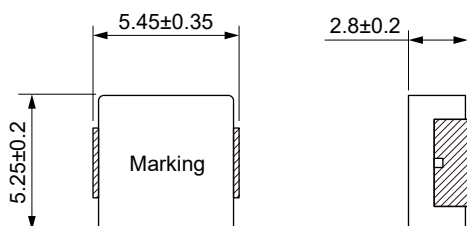
FEATURES

- High performance realized by metal dust core and hot pressing process.
- Ultra low buzz noise, due to composite construction.
- The wide pad design provides excellent anti-vibration capability.
- AEC-Q200 qualified.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 2000PCS

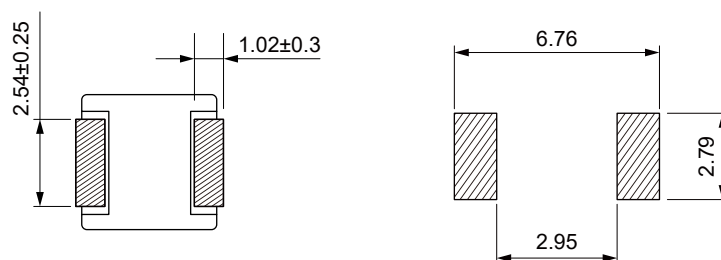
APPLICATION

- Thermal management products, such as water pumps and valves
- Headlamps, tail lamps and interior lighting
- HVAC

Dimensions: [mm]



Land Pattern: [mm]



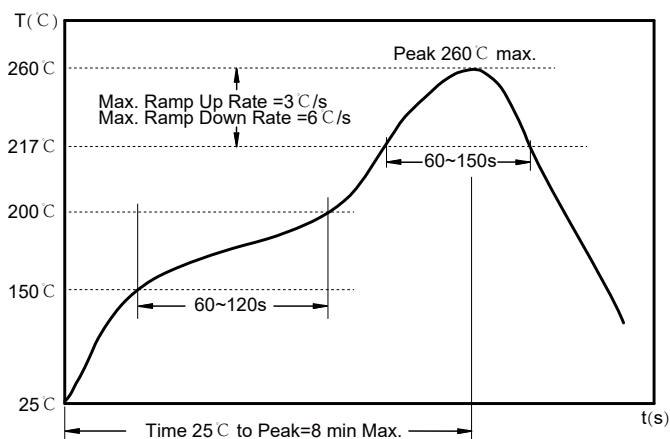
Electrical Properties:

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Max. (mΩ)
MDA5030HT-R33M	0.33	±20%	16.7	15.0	11.2	9.6	5.00
MDA5030HT-R68M	0.68	±20%	11.3	10.2	11.7	10.0	9.74
MDA5030HT-1R0M	1.00	±20%	10.8	9.7	8.0	6.5	11.5
MDA5030HT-1R5M	1.50	±20%	8.2	7.4	7.1	5.9	17.7
MDA5030HT-2R2M	2.20	±20%	7.1	6.4	6.3	5.1	23.0
MDA5030HT-3R3M	3.30	±20%	5.5	5.0	5.5	4.7	38.0
MDA5030HT-4R7M	4.70	±20%	4.4	3.9	4.5	3.9	59.0
MDA5030HT-6R8M	6.80	±20%	3.5	3.1	3.5	3.0	92.0
MDA5030HT-100M	10.0	±20%	2.8	2.5	2.35	2.0	129.5

Saturation Current will cause L to drop approximately 20%.

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 : 60~150 sec.

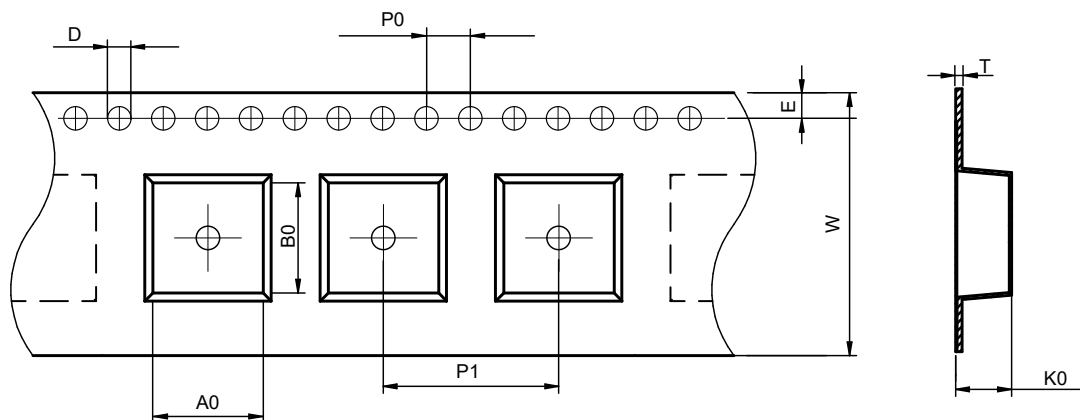
Max temperature: 260 °C .

Max time at max temperature: 30 sec.

Allowed Reflow time: 2x max.

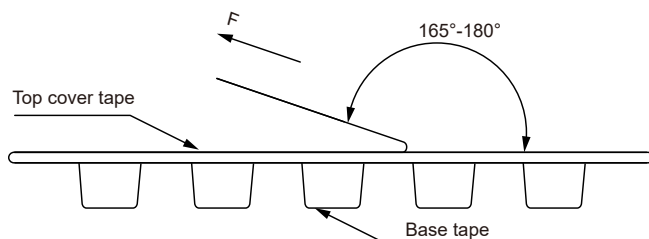
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDA5030HT	5.75±0.1	6.05±0.1	1.5±0.1	4.0±0.1	8.0±0.1	12.0±0.3	3.6±0.1	1.75±0.1	0.35±0.05

Peel force of top cover tape:

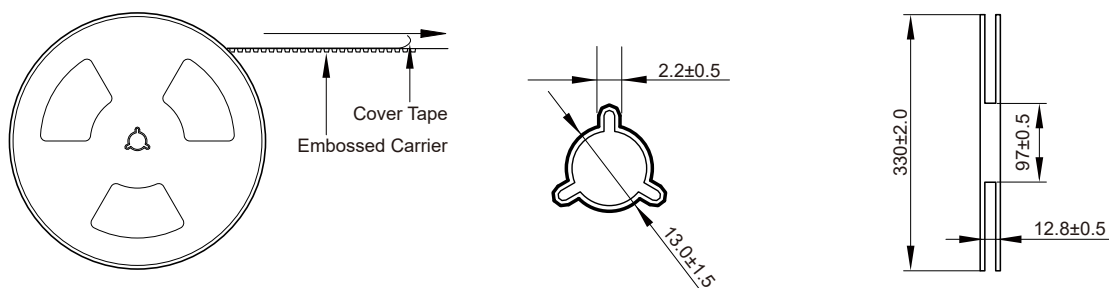


The peel force of top cover tape shall be between 0.1 to 1.3 N

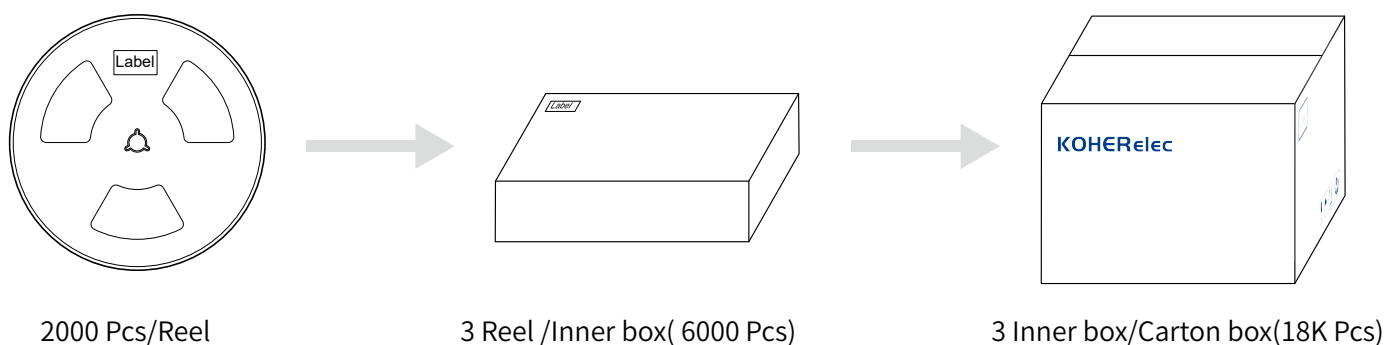
Product Marking:

Marking	K+Printing (Inductance+period)
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Reel Dimension: [mm]



Packaging Quantity:



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.