

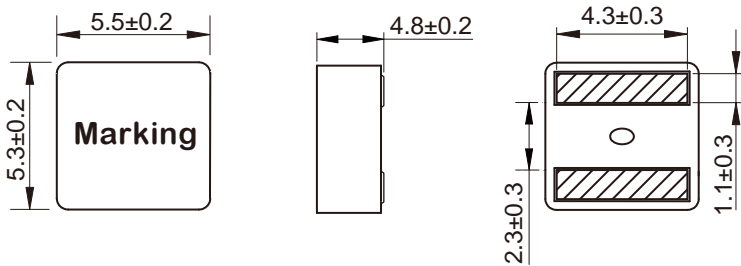


# Flat Wire Molded Inductor Size 5050

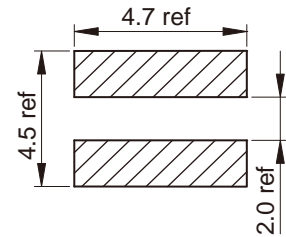


- Flat wire coil for low copper losses
  - Composite core material allows high saturation currents
  - Very low acoustic noise and very low leakage flux noise
  - High current capability and handles high transient current spikes
  - AEC-Q200 qualified
  - Operating temperature -55 to +155°C (Including self-temperature rise)
  - Quantity: 1500pcs
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- 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]



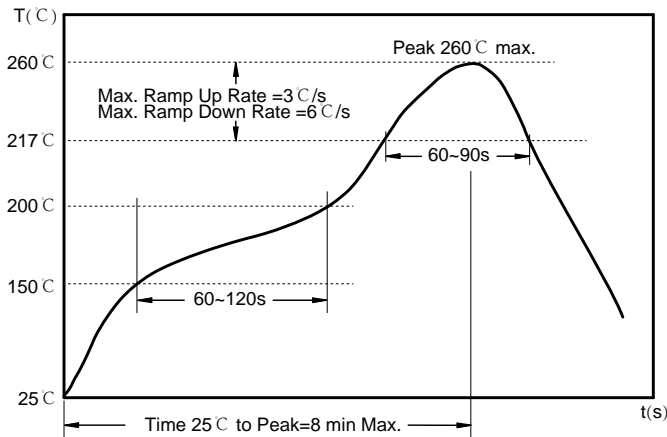
## Electrical Properties:

Part Number	Inductance (mH)	Tolerance (%)	DC Resistance (mΩ)	Inductance (mH)		DC Resistance (mΩ)
				50% Saturation	Temperature Rise	
MDTA5050-5R6M	5.6	±20%	8.6	5.3	7.2	24.20
MDTA5050-6R8M	6.8	±20%	7.8	4.8	6.4	28.60
MDTA5050-8R2M	8.2	±20%	7.2	4.6	6.1	32.50
MDTA5050-100M	10	±20%	6.5	3.8	5.0	43.00
MDTA5050-150M	15	±20%	3.7	3.0	3.9	76.70

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 °C / 60~120 sec.

Allowed time above 217 °C : 60~90 sec.

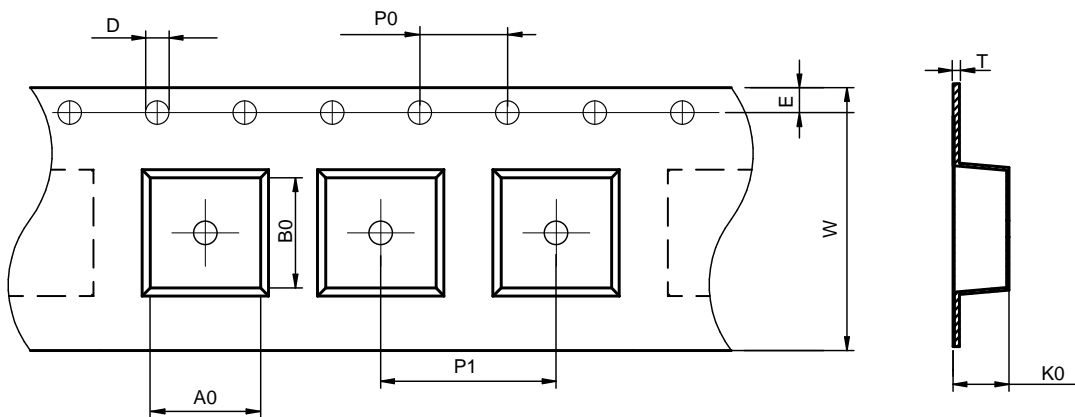
Max temperature: 260 °C .

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

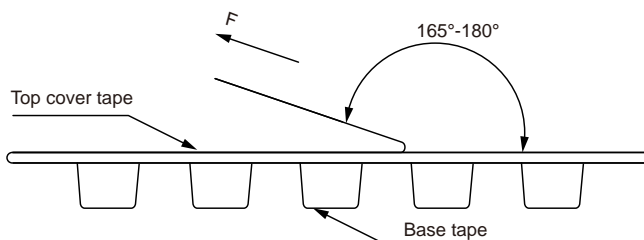
## Packaging Information:

### Tape Dimension :



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTA5050	6.0±0.1	5.7±0.1	1.5±0.1	4.0±0.1	8.0±0.1	16.0±0.3	5.3±0.1	1.75±0.1	0.40±0.05

### Peel force of top cover tape:



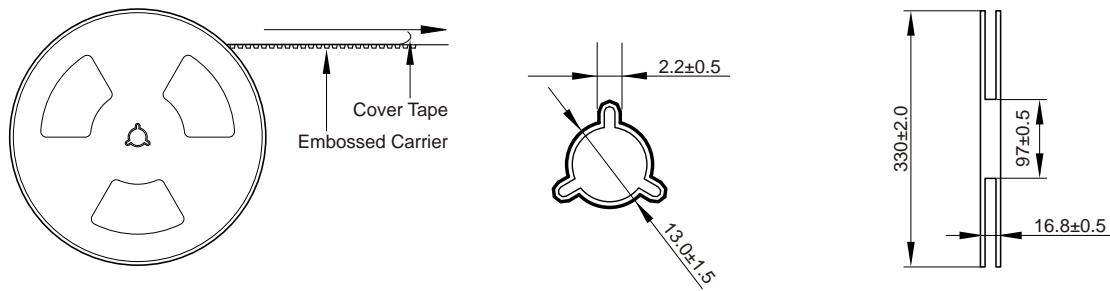
The peel force of top cover tape shall be between 0.1 to 1.3 N

### Product Marking:

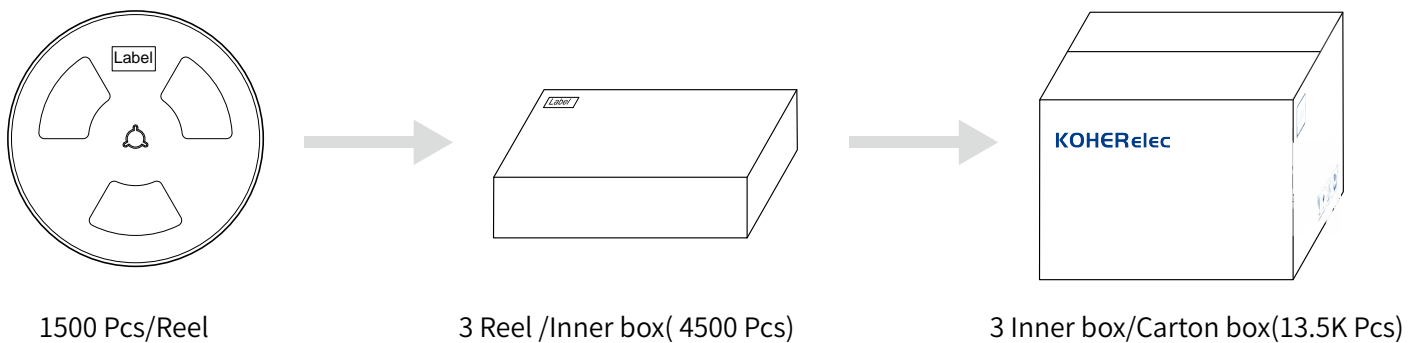
Marking	Printing (Inductance)
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## Reel Dimension: [mm]



## 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.