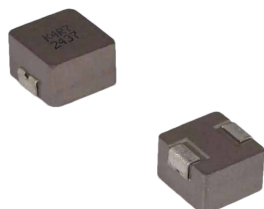


MDA Series

SMD Low Profile High Current Molded Inductor

Size 8050



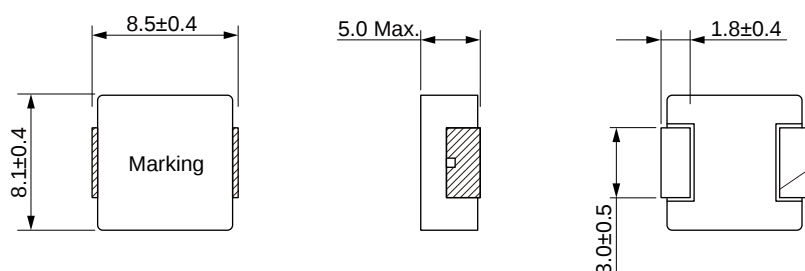
FEATURES

- Low loss realized with low DCR.
-
- 100% Lead(Pb)-Free and RoHS compliant.
- High performance (Isat) realized by metal dust core.
-
-
-

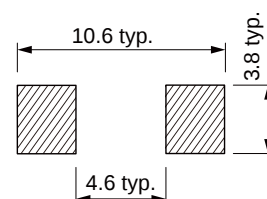
APPLICATION

-
- HVAC
-
- Audio subsystem
- Digital instrument cluster
-

Dimensions: [mm]



Land Pattern: [mm]



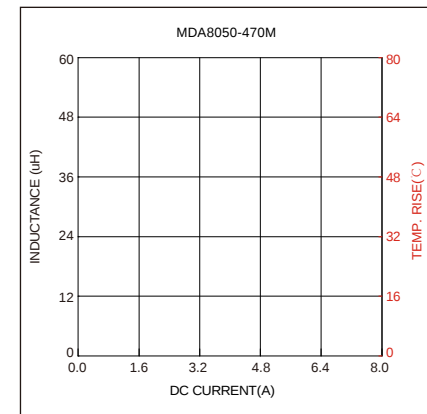
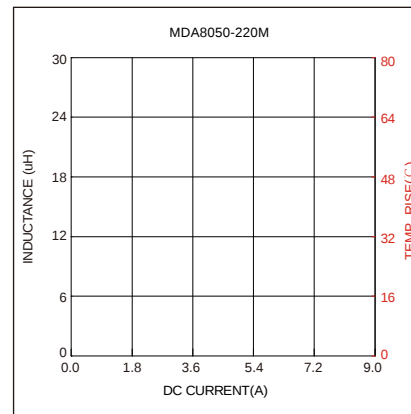
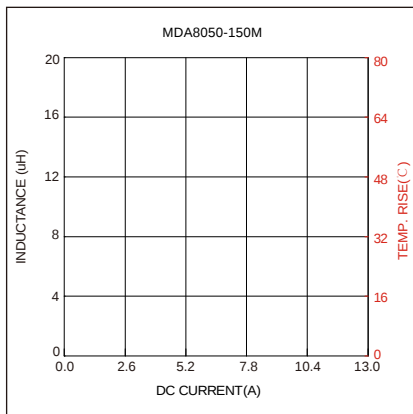
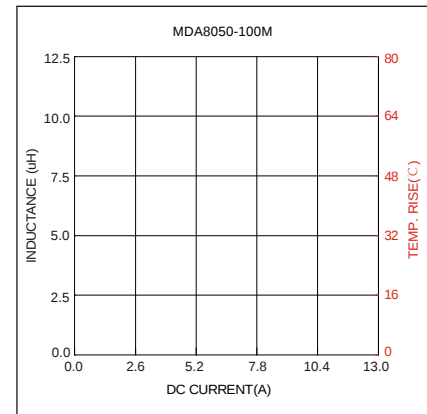
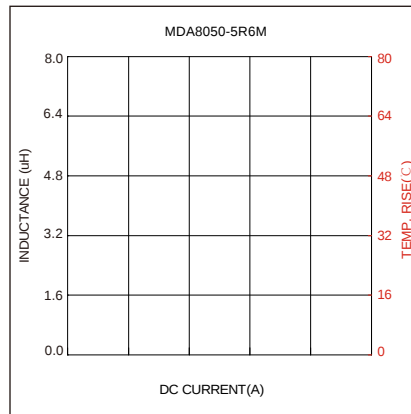
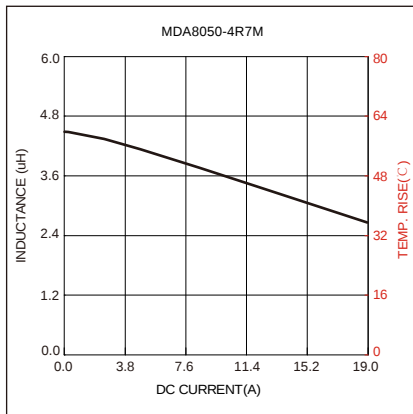
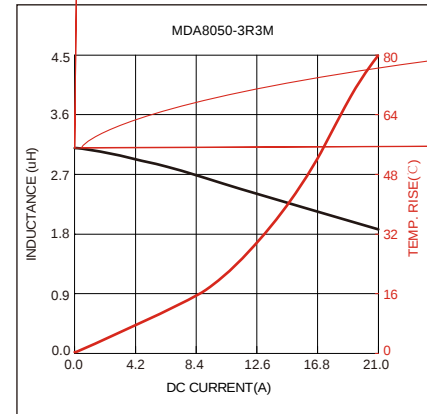
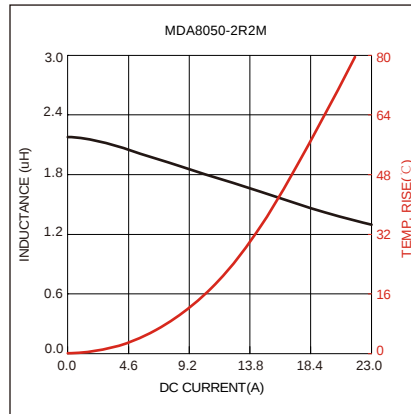
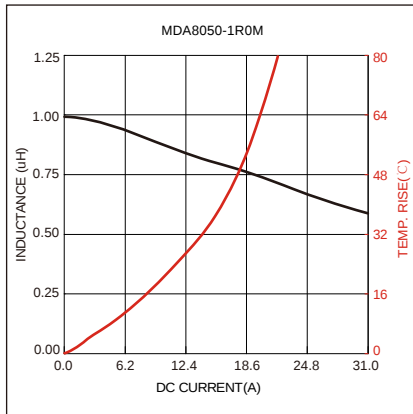
Electrical Properties:

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 Typ. (mΩ)	DC Resistance Max. (mΩ)
	1.00	±20%		14.0	22.0	19.0	4.00	4.80
	2.20	±20%		13.0	18.0			7.80
	3.30	±20%			16.3	14.0		12.0
	4.70	±20%	11.0	9.00		13.7		
		±20%		7.90		13.0	18.0	22.0
	10.0	±20%	7.80	6.80	9.00	7.70	29.0	
		±20%	6.00		7.80	6.70	44.0	
	22.0	±20%			7.20	6.20		67.0
	47.0	±20%		3.00			122	

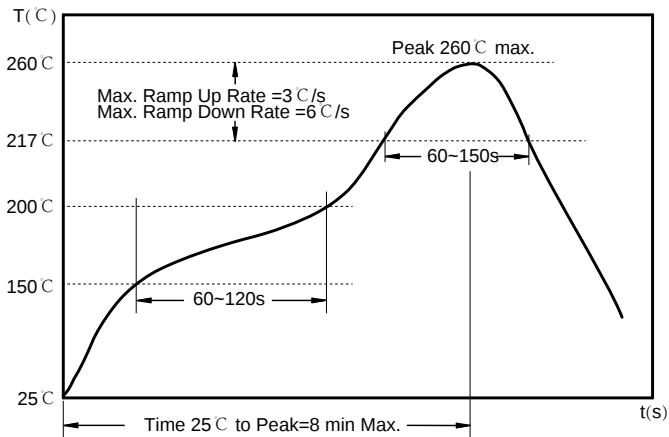
Saturation Current will cause L to drop approximately 35%

Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$

Typical Electrical Characteristics:



Soldering Reflow:



Preheat condition: 150 ~200 °C / 60~120 sec.

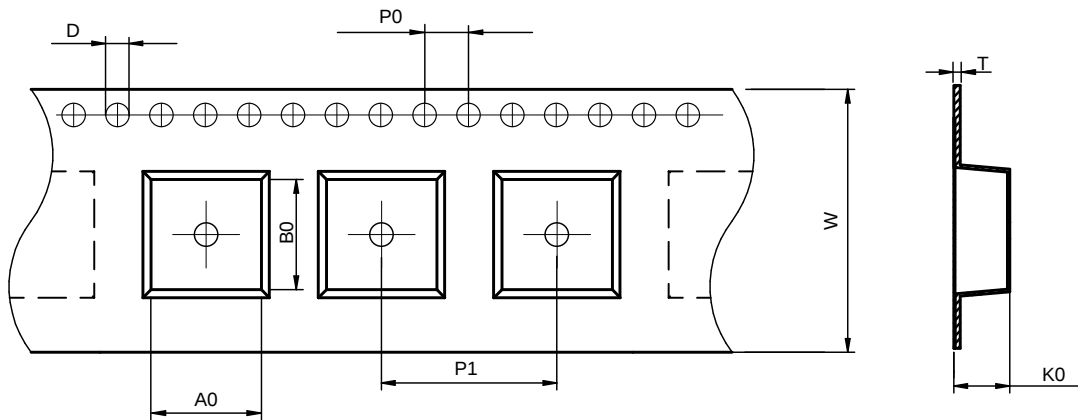
Allowed time above 217 °C : 60~150 sec.

Max temperature: 260 °C .

Allowed Reflow time: 2x max.

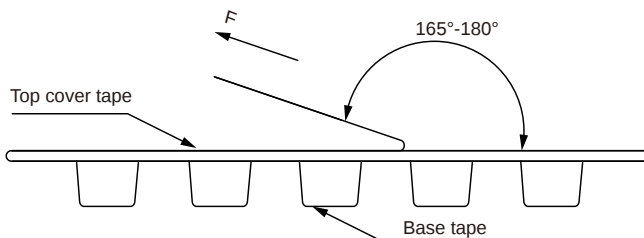
Packaging Information:

Tape Dimension :



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	T (mm)
MDA8050	8.4 typ	9.6 typ	1.5±0.1	4.0±0.1	12.0±0.1	16.0±0.2	5.3 typ	0.35±0.1

Peel force of top cover tape:

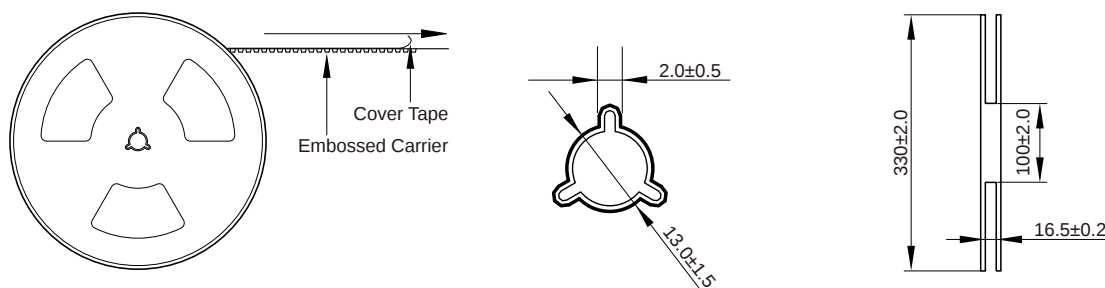


The peel force of top cover tape shall be between 0.1 to 1.3 N

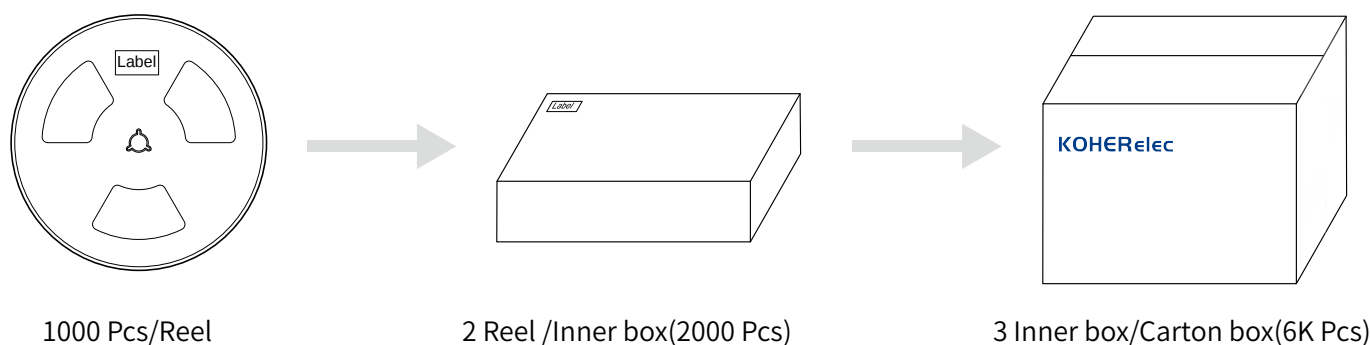
Product Marking:

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.