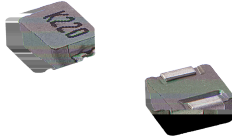


MDA Series

SMD Low Profile High Current Molded Inductor Size 4020



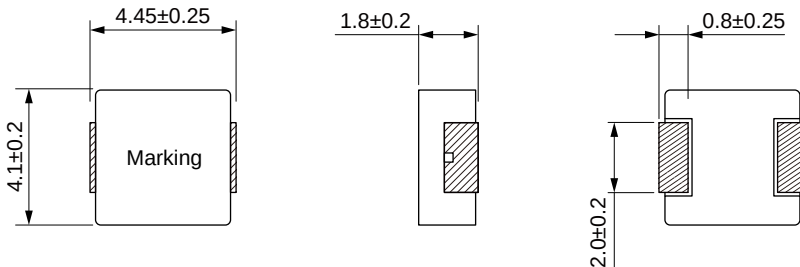
FEATURES

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

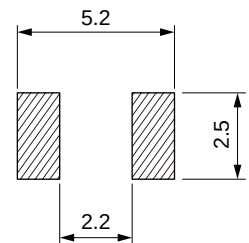
APPLICATION

- HVAC
- Audio subsystem
- Digital instrument cluster
-

Dimensions: [mm]



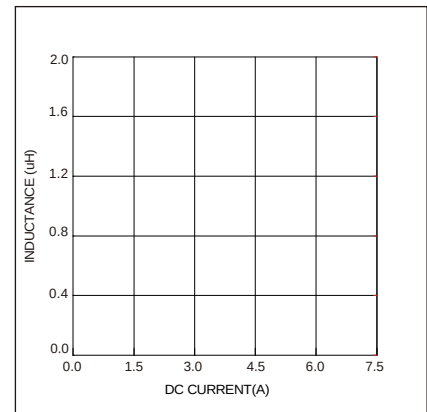
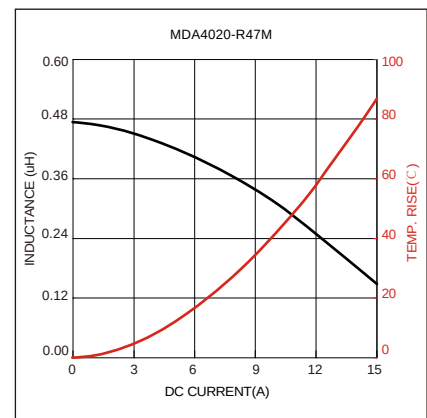
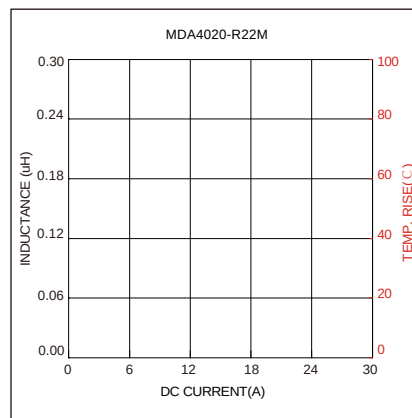
Land Pattern: [mm]



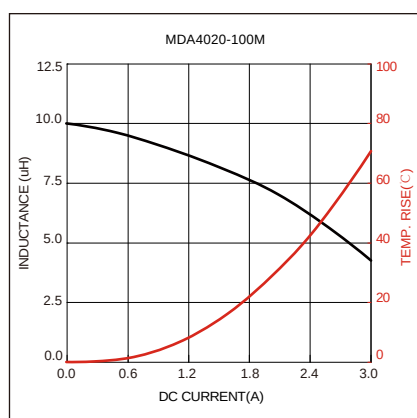
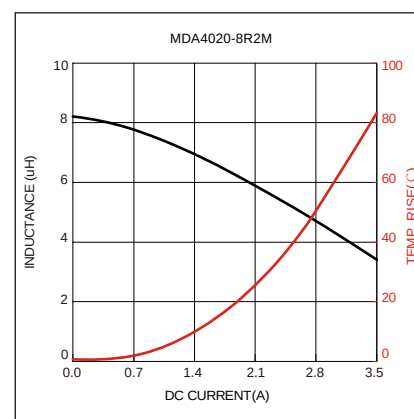
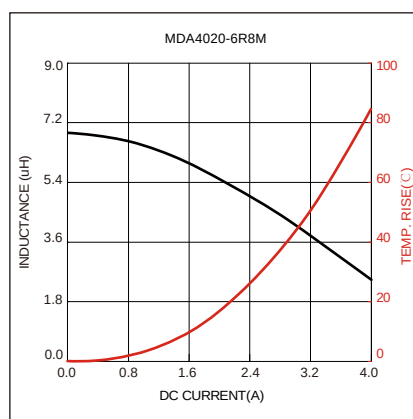
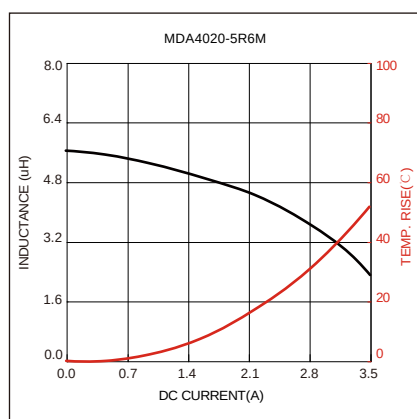
Electrical Properties:

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)
MDA4020-R10M	0.10	±20%	16.0	14.0	26.0	22.0	2.90	
MDA4020-R22M	0.22	±20%	14.0				4.80	
MDA4020-R47M	0.47	±20%	10.0	9.0	9.0	8.0		11.0
MDA4020-R68M	0.68	±20%	9.0	8.0	7.6	6.6	11.6	
MDA4020-1R0M	1.00	±20%					19.0	22.0
		±20%	6.7			4.8	27.0	
MDA4020-2R2M	2.20	±20%				4.0	41.0	48.0
		±20%				2.7		
MDA4020-4R7M	4.70	±20%			2.8		84.0	

Typical Electrical Characteristics:



Typical Electrical Characteristics:



Soldering Reflow:

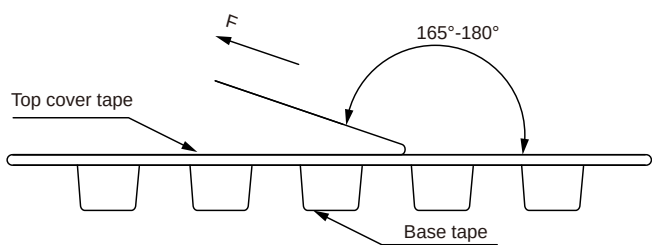
Preheat condition: 150 ~200℃ / 60~120 sec.
Allowed time above 217℃ : 60~90 sec.
Max temperature: 260℃ .

Allowed Reflow time: 2x max.

Packaging Information:

Tape Dimension:

Peel force of top cover tape:



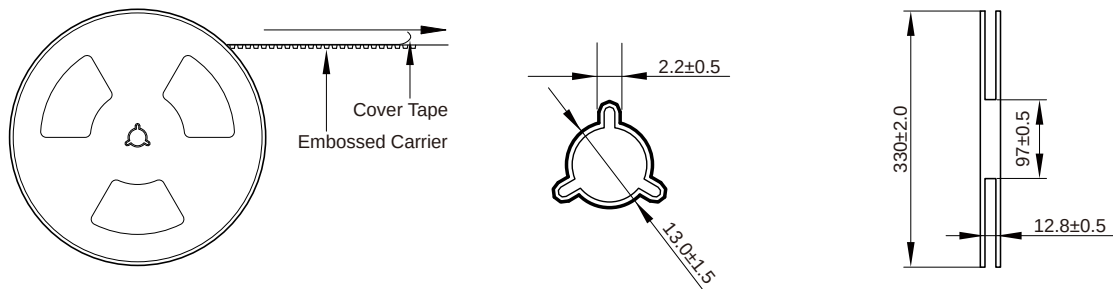
a

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

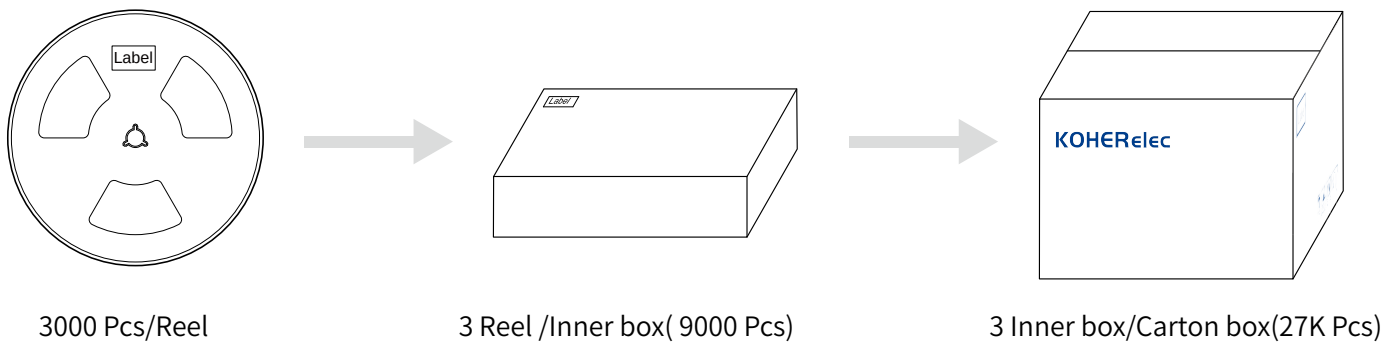
Product Marking:

Marking	K+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.