MDSA Series

SMD Low Profile High Current Molded Inductor

Size 4020



FEATURES

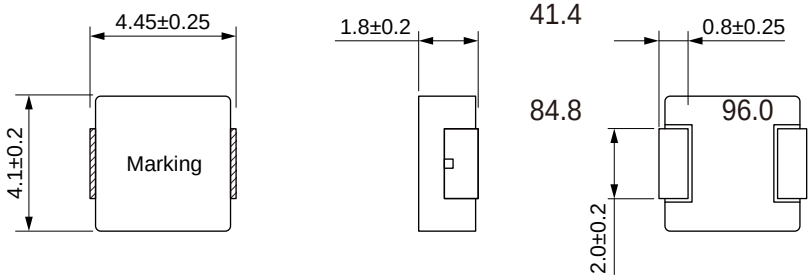
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- Capable of corresponding high frequency .
- Low loss realized with low DCR.
- High performance (Isat) realized by metal dust core.
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- 100% Lead(Pb)-Free and RoHS compliant.
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APPLICATION

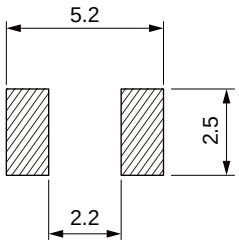
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DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
9.60	11.1
11.7	
19.2	22.2
41.4	
84.8	96.0

Dimensions: [mm]



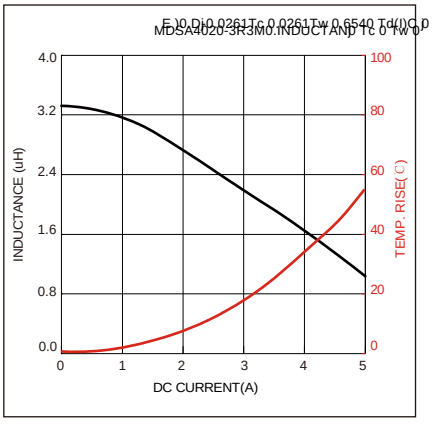
Land Pattern: [mm]



Electrical Properties:

Part No	Inductance @100KHz/1V (μH)			Temperature Rise Current Max. (A)	Satura on Current Typ. (A)	Satura on Current Max. (A)		
MDSA4020-R10M	0.10				26.0	21.1		
MDSA4020-R22M	0.22			12.0				
MDSA4020-R47M	0.47			8.64	9.00	7.70		
MDSA4020-R68M	0.68			7.68	7.60			
MDSA4020-1R0M	1.00			6.24		4.80 4.60		
MDSA4020-2R2M	2.20			4.80				
						2.60		
MDSA4020-4R7M	4.70				2.80	2.40		

Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C



Soldering Reflow:

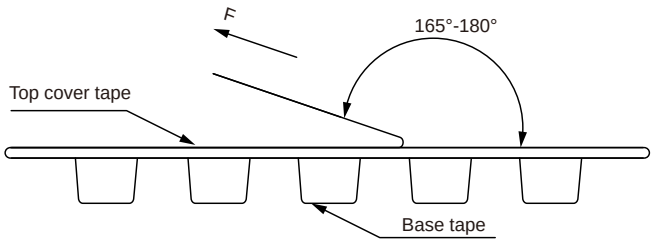
Preheat condition: 150 ~200℃/ 60~120 sec.

Allowed time above 217℃: 60~90 sec.

Packaging Information:

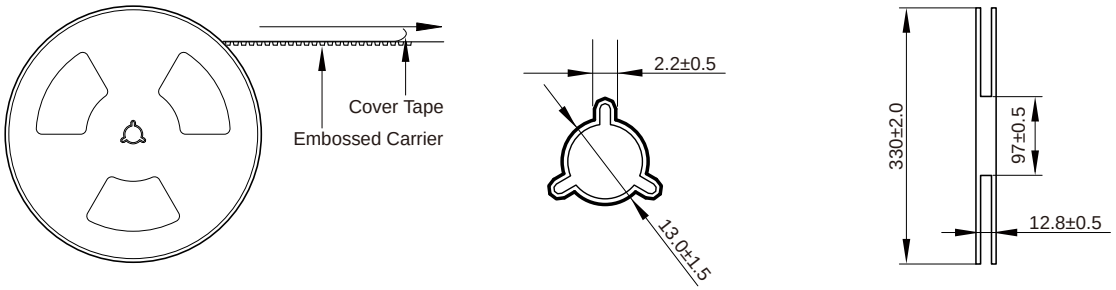
Tape Dimension:

Peel force of top cover tape:

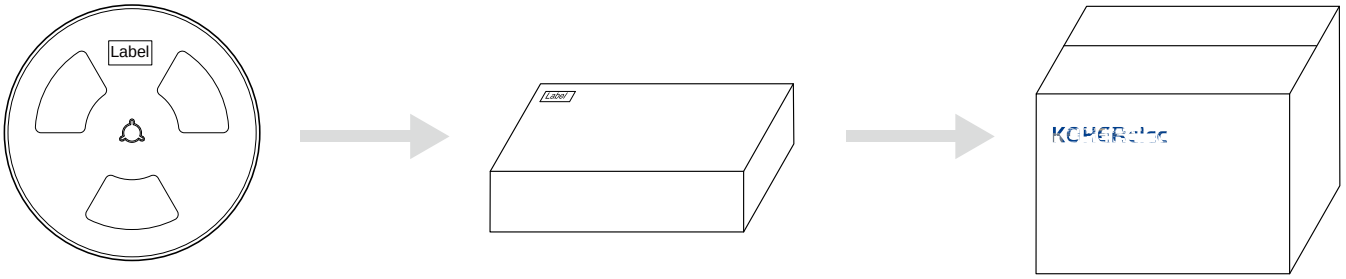


The peel force of top cover tape shall be between 0.1 to 1.3 N

Reel Dimension：[mm]



Packaging Quantity:



3000 Pcs/Reel

3 Reel /Inner box(9000 Pcs)

3 Inner box/Carton box(27K 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.