MDSA Series

SMD Low Profile High Current Molded Inductor

Size 4020

FEATURES

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APPLICATION

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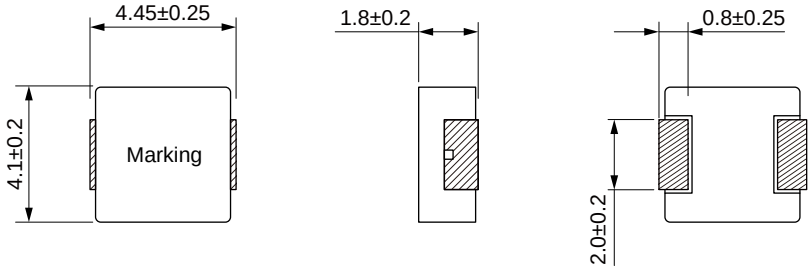
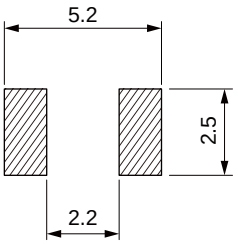
Dimensions: [mm]



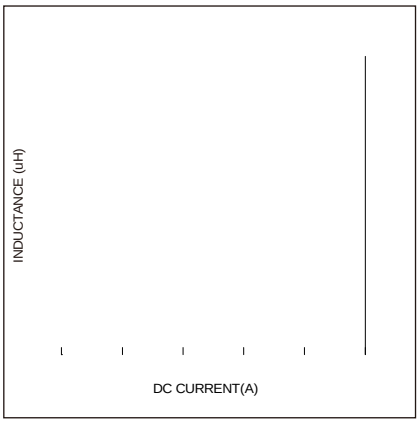
Land Pattern: [mm]

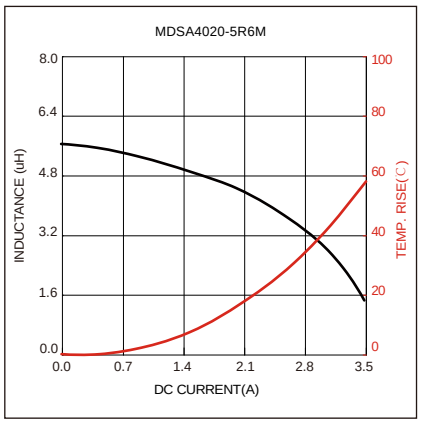


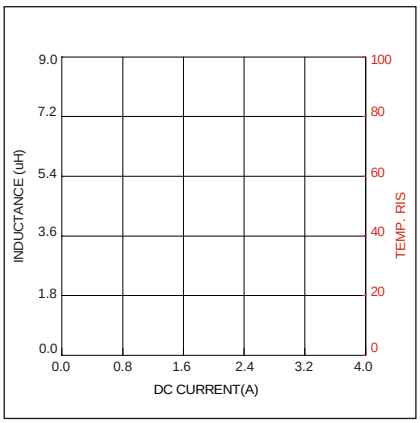
Electrical Properties:

Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Satura on Current Typ. (A)	Satura on Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
			мр◊ф	мо◊у			н◊фм	о◊нр
					мп◊ф	мн◊у	п◊ум	р◊рл
				у◊ф	у◊ф	у◊л	ф◊рл	
а5{!плнлπwсуа	л◊су		у◊у	у◊л	т◊р	с◊р		мо◊т
					р◊п	р◊л	мф◊л	
а5{!плнлπмwра	м◊рл			р◊с	р◊л			ом◊о
			р◊р	р◊л	п◊р			пу◊л
а5{!плнлπowоа	о◊ол			о◊п	о◊л		ср◊о	тр◊м
			о◊у	о◊л	н◊у		уп◊м	фр◊н

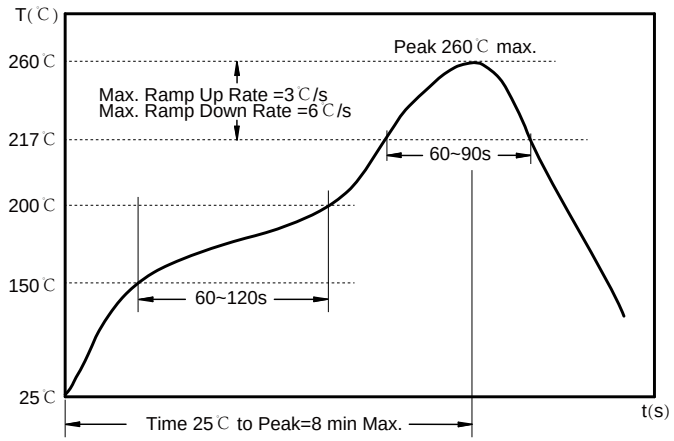
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C




MDSA4020-5R6M
INDUCTANCE (uH)
TEMP. RISE(℃)
8.0
6.4
4.8
3.2
1.6
0.0
100
80
60
40
20
0
0.0
0.7
1.4
2.1
2.8
3.5
DC CURRENT(A)


INDUCTANCE (uH)
TEMP. RIS
9.0
7.2
5.4
3.6
1.8
0.0
100
80
60
40
20
0
0.0
0.8
1.6
2.4
3.2
4.0
DC CURRENT(A)

Soldering Reflow:



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

Allowed time above 217℃: 60~90 sec.

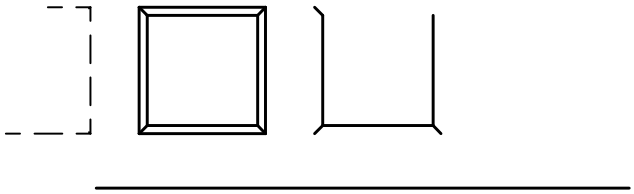
Max temperature: 260℃.

Max time at max temperature: 5 sec.

Allowed Reflow time: 2x max.

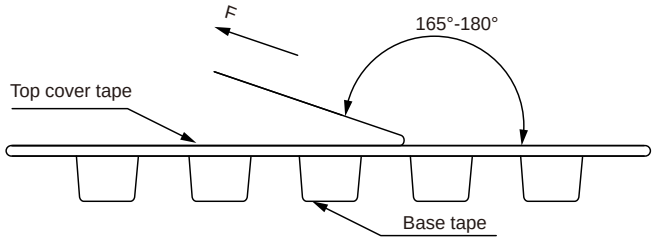
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDSA4020	4.5 ± 0.1	4.85 ± 0.1	1.5 ± 0.1	4.0 ± 0.1	8.0 ± 0.1	12.0 ± 0.3	2.3 ± 0.1	1.75 ± 0.1	0.35 ± 0.05

Peel force of top cover tape:

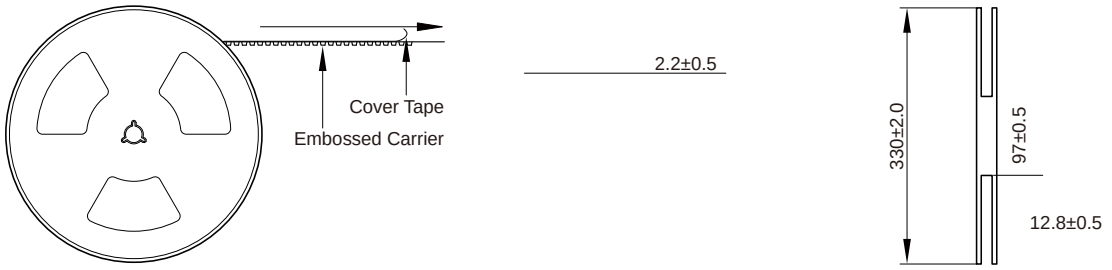


The peel force of top cover tape shall be between 0.1 to 1.3 N

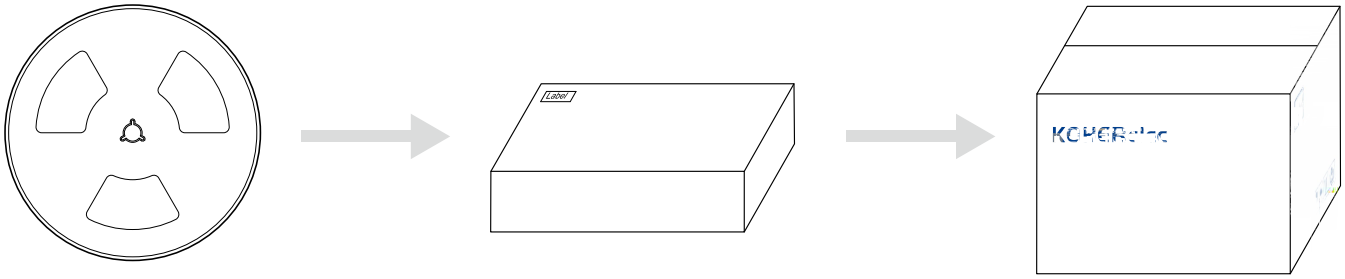
Product Marking:

Marking	K+Printing Inductance)

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.Label