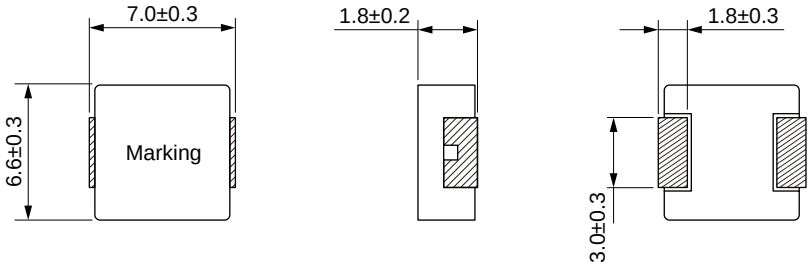
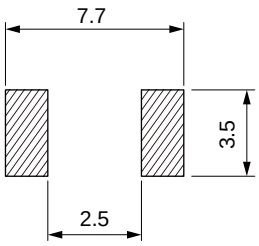
SMD Power Inductor
Size 6020

-
-
-
-
-
-
-
-
-
-
-
-
-
-

Dimensions: [mm]



Land Pattern: [mm]



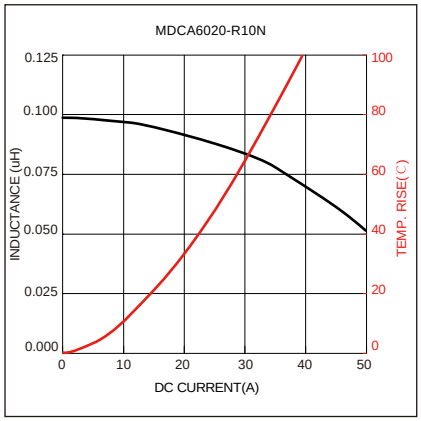
Electrical Properties:

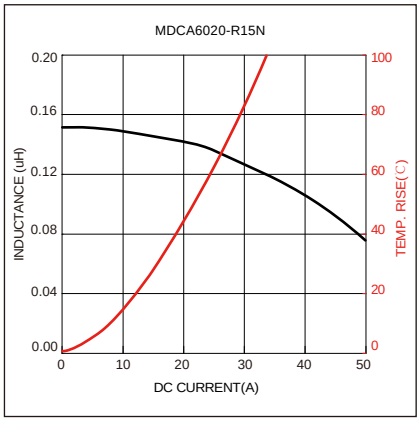
	(µH)			Saturation	(mΩ)	(mΩ)
MDCA6020-R10N		±30%				
		±30%				
MDCA6020-R22N		±30%				
MDCA6020-R33M		±20%				
MDCA6020-R47M		±20%				
		±20%				
MDCA6020-R68M		±20%				
MDCA6020-1R0M		±20%				
		±20%				
MDCA6020-2R2M		±20%				
MDCA6020-3R3M		±20%				
MDCA6020-4R7M		±20%				
		±20%				
MDCA6020-6R8M		±20%				
MDCA6020-8R2M		±20%			101	116

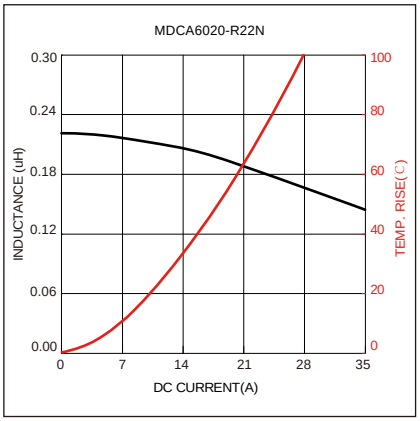
	(μH)			Saturation	(mΩ)	(mΩ)
MDCA6020-100M		±20%			134	
		±20%			190	210
MDCA6020-220M		±20%			236	280

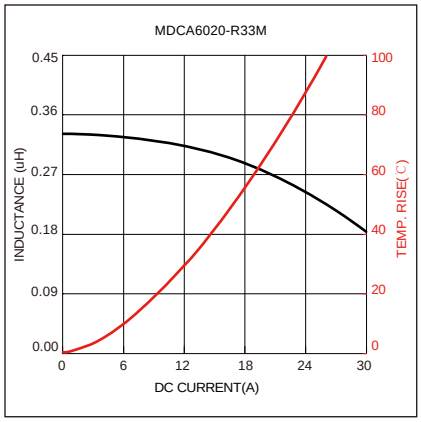
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

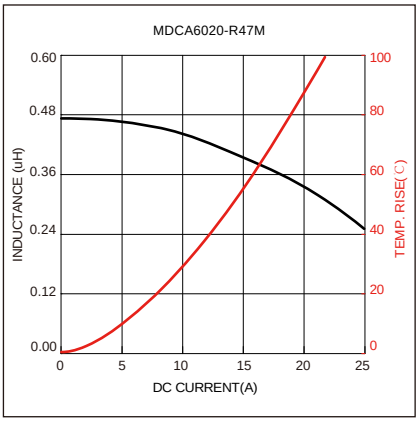
Typical Electrical Characteristics:

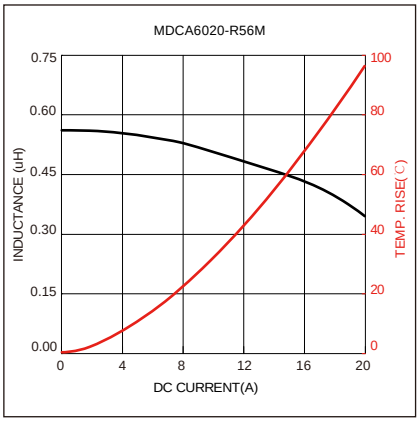


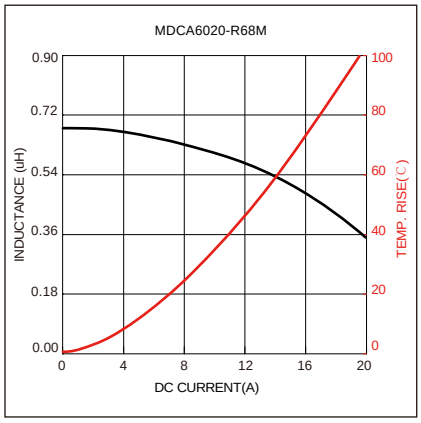


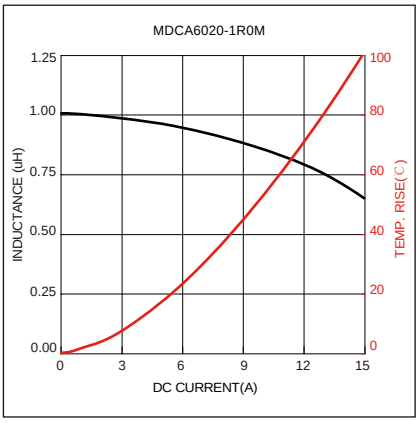


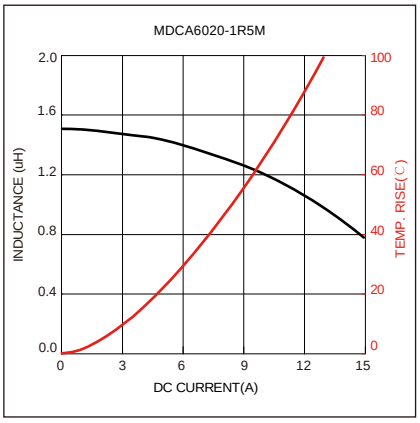


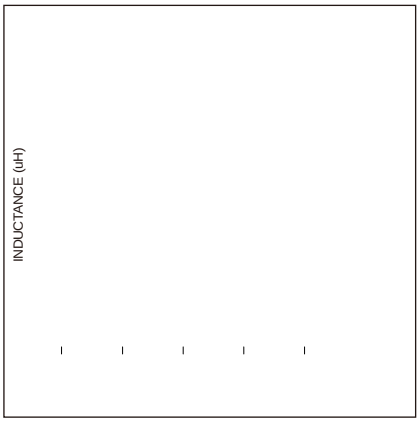


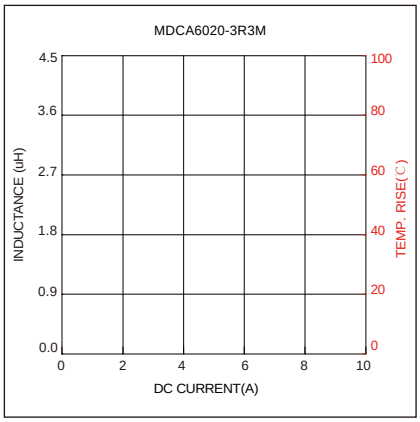


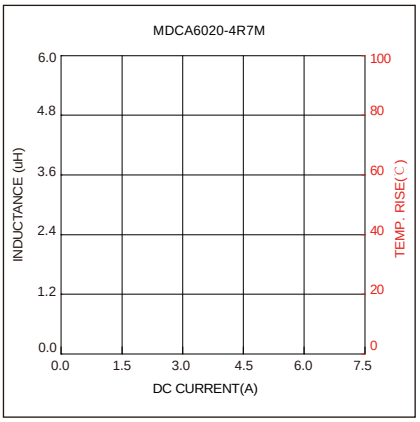


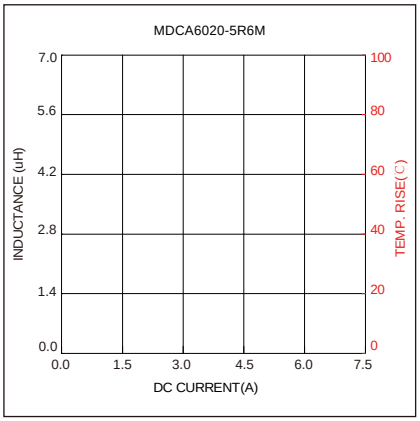


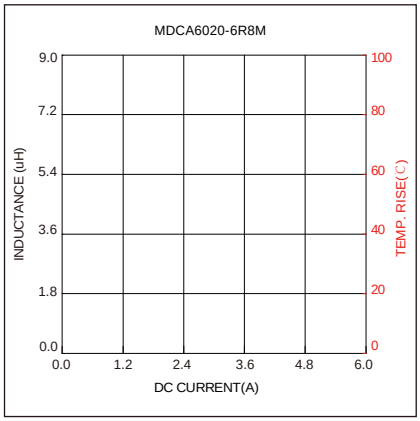


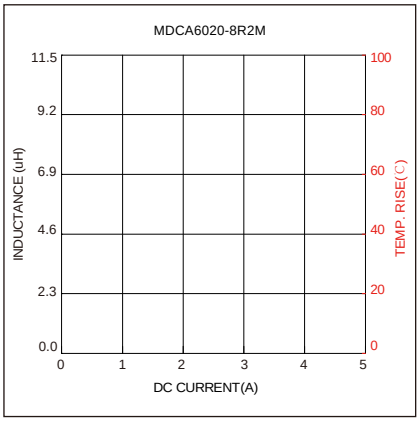

INDUCTANCE (uH)

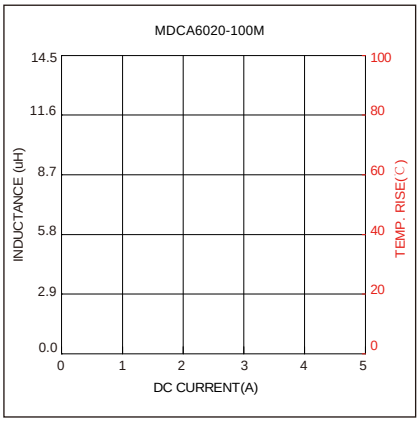

MDCA6020-3R3M
INDUCTANCE (uH)
4.5
3.6
2.7
1.8
0.9
0.0
TEMP. RISE(℃)
100
80
60
40
20
0
0
2
4
6
8
10
DC CURRENT(A)

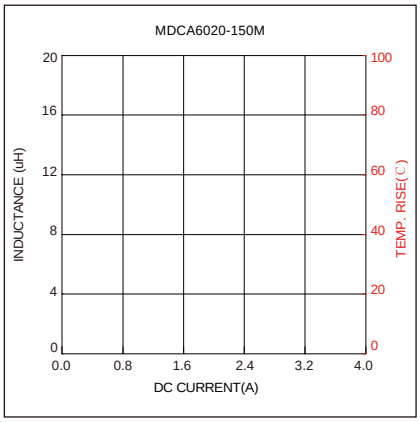

MDCA6020-4R7M
INDUCTANCE (uH)
6.0
4.8
3.6
2.4
1.2
0.0
TEMP. RISE(℃)
100
80
60
40
20
0
0.0
1.5
3.0
4.5
6.0
7.5
DC CURRENT(A)

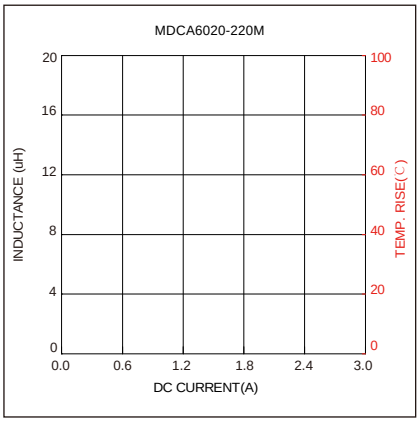

MDCA6020-5R6M
INDUCTANCE (uH)
7.0
5.6
4.2
2.8
1.4
0.0
TEMP. RISE(℃)
100
80
60
40
20
0
0.0
1.5
3.0
4.5
6.0
7.5
DC CURRENT(A)


MDCA6020-6R8M
INDUCTANCE (uH)
9.0
7.2
5.4
3.6
1.8
0.0
TEMP. RISE(℃)
100
80
60
40
20
0
0.0
1.2
2.4
3.6
4.8
6.0
DC CURRENT(A)

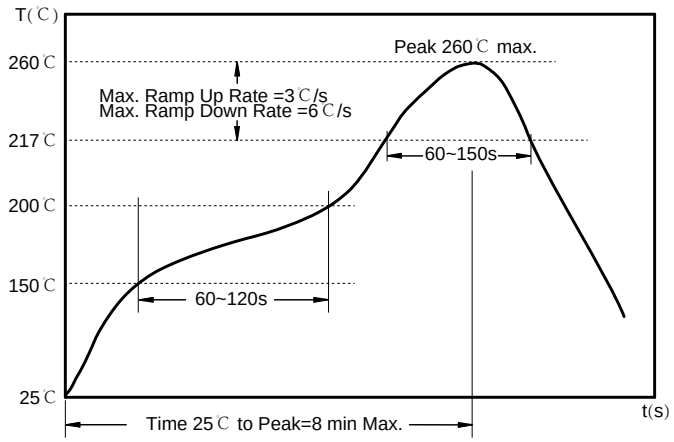

MDCA6020-8R2M
INDUCTANCE (uH)
11.5
9.2
6.9
4.6
2.3
0.0
TEMP. RISE(℃)
100
80
60
40
20
0
0
1
2
3
4
5
DC CURRENT(A)


MDCA6020-100M
INDUCTANCE (uH)
14.5
11.6
8.7
5.8
2.9
0.0
TEMP. RISE(℃)
100
80
60
40
20
0
0
1
2
3
4
5
DC CURRENT(A)


MDCA6020-150M
INDUCTANCE (uH)
20
16
12
8
4
0
TEMP. RISE(℃)
100
80
60
40
20
0
0.0
0.8
1.6
2.4
3.2
4.0
DC CURRENT(A)


MDCA6020-220M
INDUCTANCE (uH)
20
16
12
8
4
0
TEMP. RISE(℃)
100
80
60
40
20
0
0.0
0.6
1.2
1.8
2.4
3.0
DC CURRENT(A)

Soldering Reflow:



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

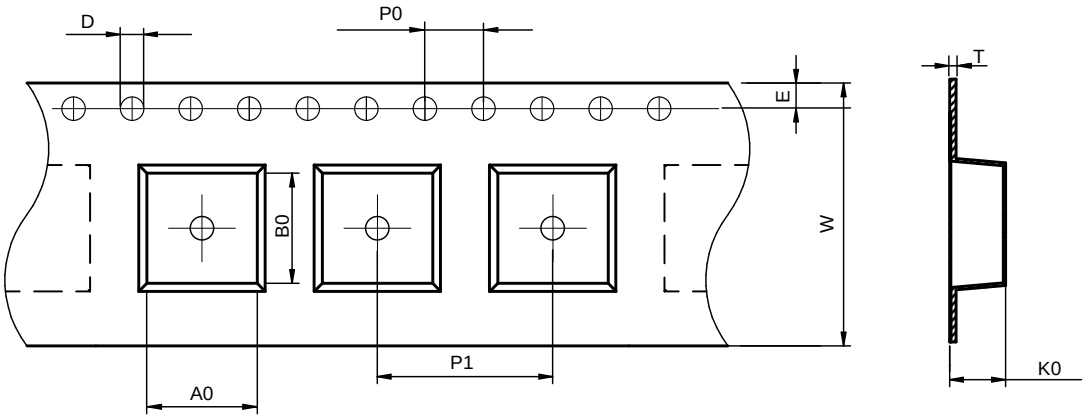
Allowed time above 217℃: 60~150 sec.

Max temperature: 260℃.

Allowed Reflow time: 2x max.

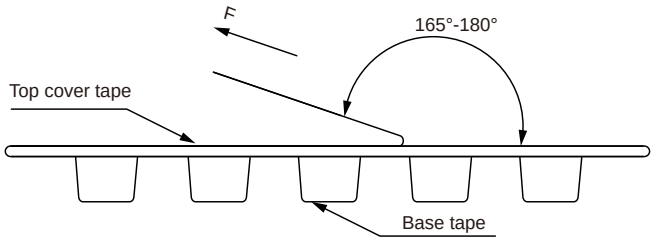
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDCA6020	7.0 ± 0.1	7.7 ± 0.1	1.5 ± 0.1	4.0 ± 0.1	12.0 ± 0.1	16.0 ± 0.3	2.3 ± 0.1	1.75 ± 0.1	0.35 ± 0.05

Peel force of top cover tape:

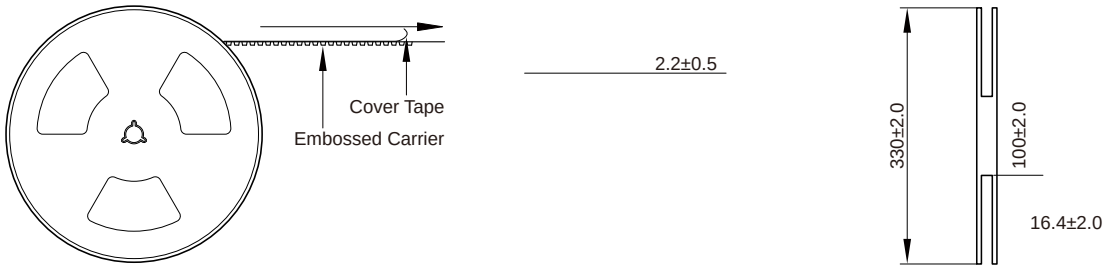


The peel force of top cover tape shall be between 0.1 to 1.3 N

Product Marking:

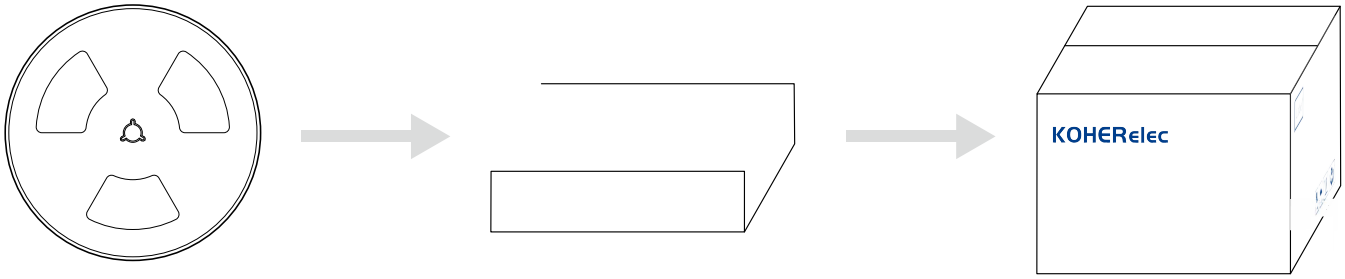
Marking	Printing Inductance+period)

Reel Dimension：[mm]



Packaging Quantity:

021-34753367 Contact@ohergroup.com
F9, Lobe 4188, 105 KOHER Rd, Minhang District,



1500 Pcs/Reel

2 Reel /Inner box(3000 Pcs)

3 Inner box/Carton box(9K 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.