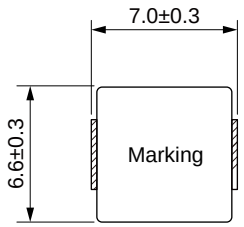
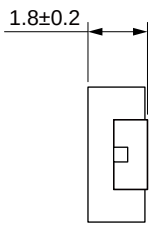
SMD Power Inductor
Size 6020

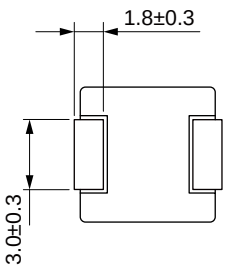
- Shielded construc on.
- Capable of corresponding high frequency.
- Low loss realized with low DCR.
- High performance (Isat) realized by Carbonyl Powder.
- Ultra low buzz noise, due to composite construc on.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified.
  Opera ng temperature: -55 to +125 °C(including self-temperature rise)
- Quan ty: 1500pcs.

- Headlamps, tail lamps and interior ligh ng.
- HVAC.
- Doors, window li and seat control.
- Audio subsystem.
- Digital instrument cluster.
- In-Vehicle Infotainment and naviga on.

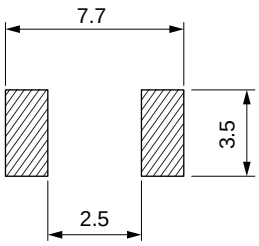
Di4wnsions: [mm]







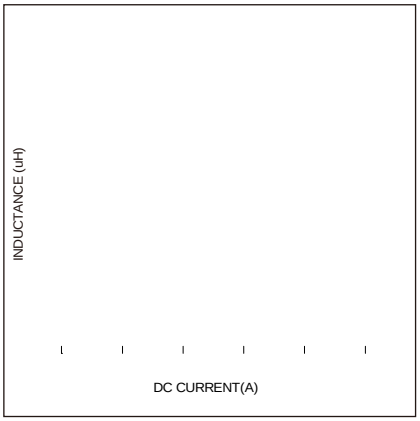
Land Pattern: [mm]

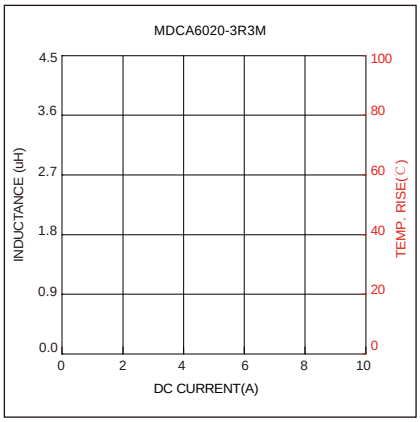


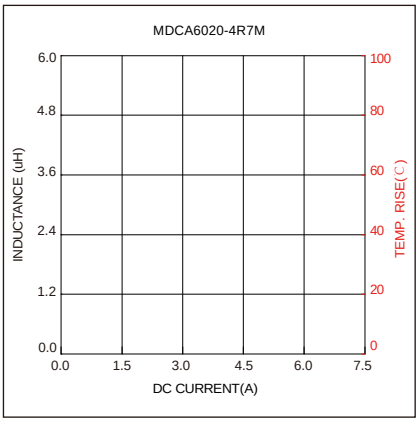
Electrical Properties:

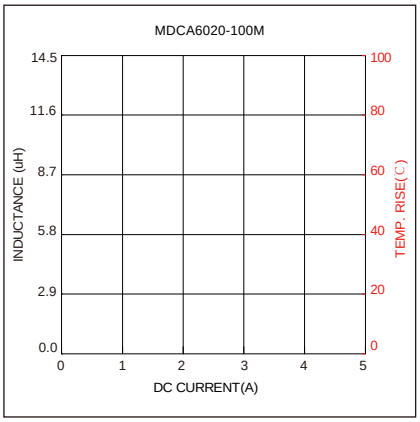
Temperature Rise Current (A)	Current (A)		
21.0		2.0	2.4
18.0		2.3	2.7
15.0	K	3.5	4.0
14.0	K	4.5	5.0
11.7	K	7.1	8.3
11.0	K	7.9	9.3
10.5	K	8.3	10.0
8.0	K	16.5	18.0
7.0	K	23.0	27.0
6.0	K	32.0	37.0

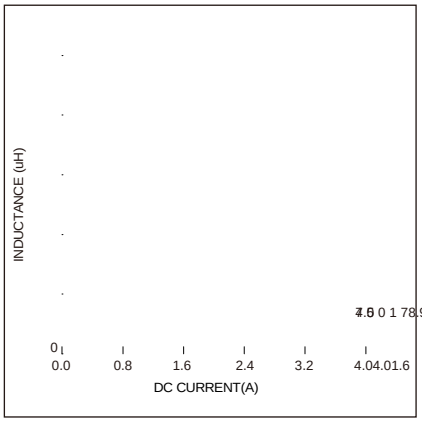
Part No	Inductance @ 100KHz/1V	Tolerance				
MDCA6020-100M	10.0	±20%	2.8	4.0	134	154
MDCA6020-150M	15.0	±20%	2.1	3.3	190	210
MDCA6020-220M	22.0	±20%	1.5	2.5	236	280



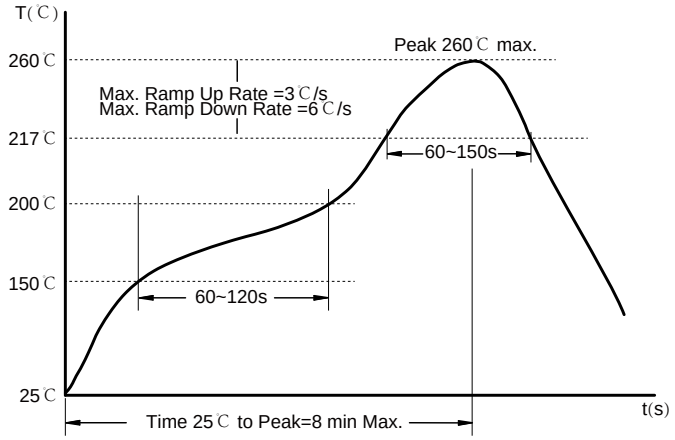

MDCA6020-3R3M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
4.5
3.6
2.7
1.8
0.9
0.0
100
80
60
40
20
0
0
2
4
6
8
10


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


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


INDUCTANCE (uH)
DC CURRENT(A)
0
0.0
0.8
1.6
2.4
3.2
4.0

Soldering Reflow:



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

Allowed time above 217℃: 60~150 sec.

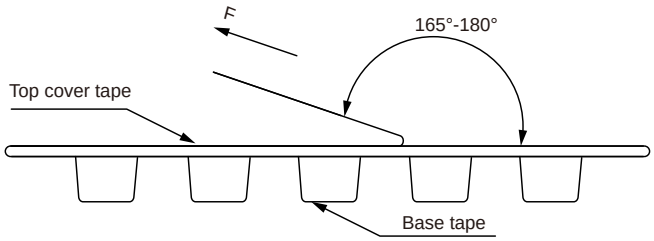
Max temperature: 260℃.

Allowed Reflow time: 2x max.

Packaging Information:

Tape Dimension:

Peel force of top cover tape:

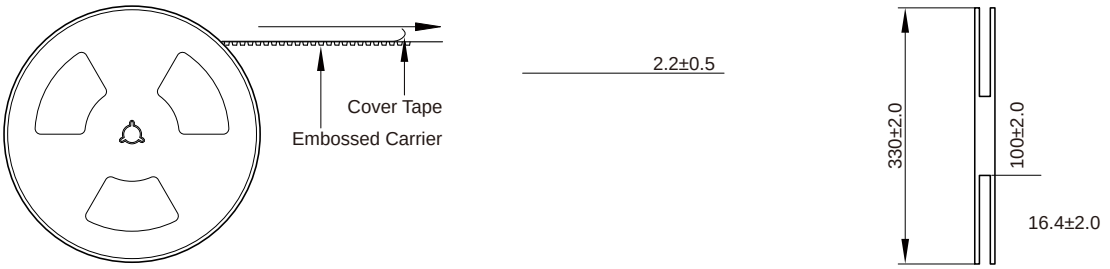


The peel force of top cover tape shall be between 0.1 to 1.3 N

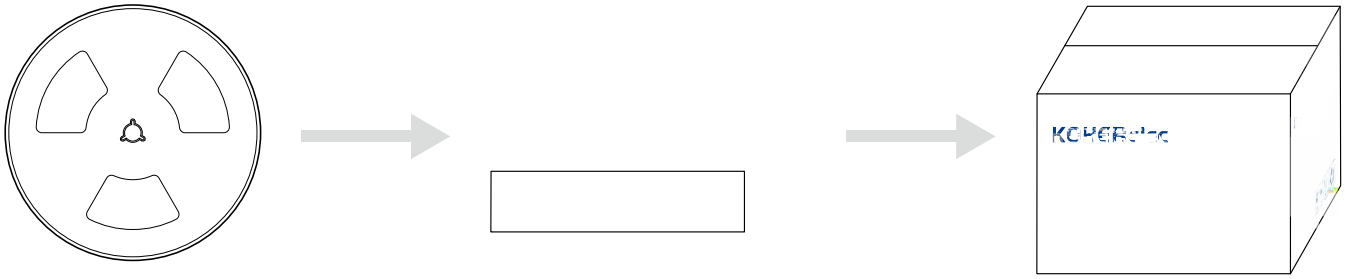
Product Marking:

Marking	Printing Inductance+period)

Reel Dimension：[mm]



Packaging Quantity:



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.