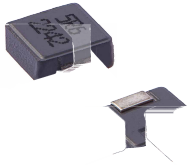
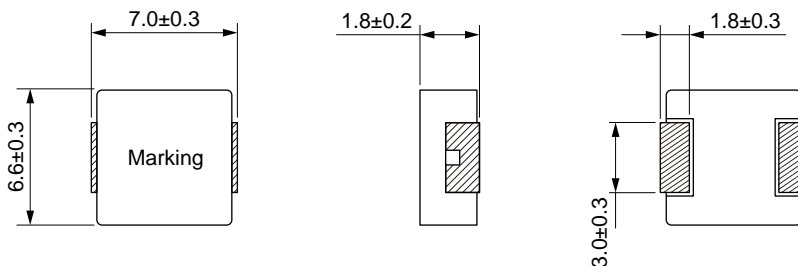


SMD Power Inductor Size 6020

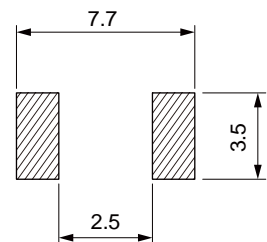


- Shielded construction.
 - Capable of corresponding high frequency.
 - Low loss realized with low DCR.
 - High performance (Isat) realized by Carbonyl Powder.
 - Ultra low buzz noise, due to composite construction.
 - 100% Lead(Pb)-Free and RoHS compliant.
 - AEC-Q200 qualified.
 - Operating temperature: -55 to +125 °C(including self-temperature rise)
 - Quantity: 1500pcs
- Headlamps, tail lamps and interior lighting.
 - HVAC.
 - Doors, window lift and seat control.
 - Audio subsystem.
 - Digital instrument cluster.
 - In-Vehicle Infotainment and navigation.

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

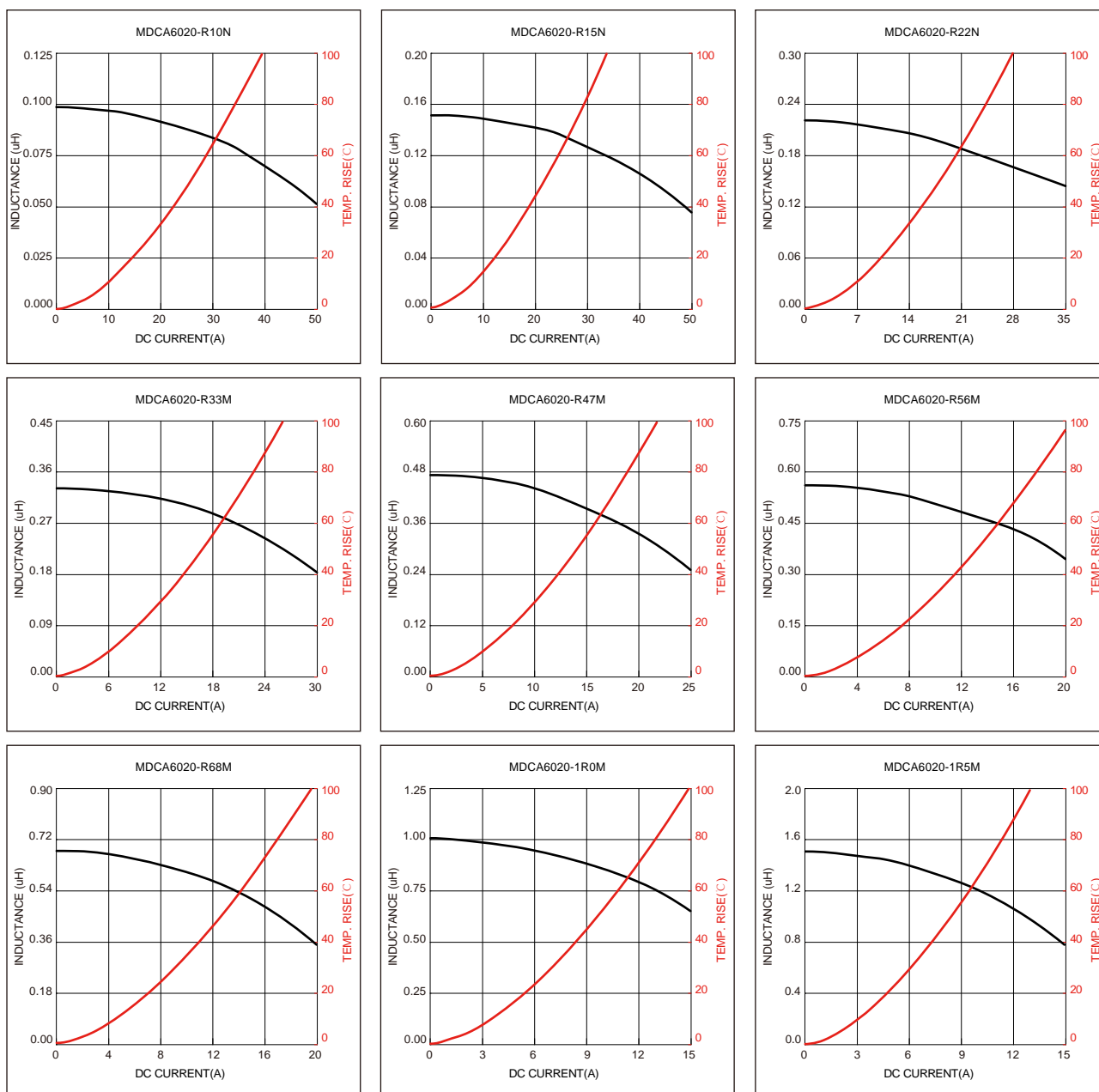
	(μH)			Saturation	($\text{m}\Omega$)	($\text{m}\Omega$)
	0.10		21.0	40.0	2.0	2.4
MDCA6020-R15N	0.15		18.0	39.0	2.3	2.7
	0.22		15.0	32.0	3.5	4.0
	0.33		14.0	25.0	4.5	5.0
	0.47		11.7	20.0	7.1	8.3
MDCA6020-R56M	0.56		11.0	18.0	7.9	9.3
	0.68		10.5	16.0	8.3	10.0
	1.00		8.0	14.0	16.5	18.0
MDCA6020-1R5M	1.50		7.0	12.0	23.0	27.0
	2.20		6.0	10.0	32.0	37.0
	3.30		5.0	8.0	43.0	48.0
	4.70		4.5	7.0	53.0	60.0
MDCA6020-5R6M	5.60		4.0	6.0	59.0	68.0
	6.80		4.0	5.5	63.0	73.0
	8.20		3.2	5.0		

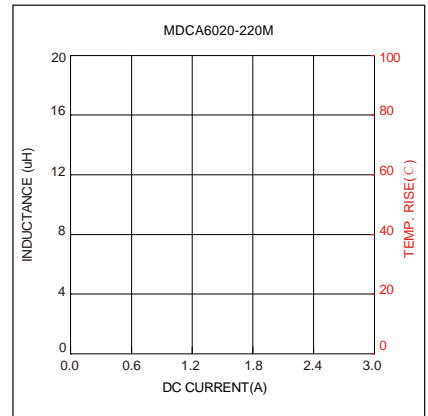
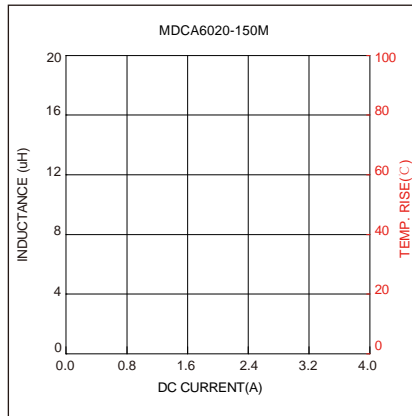
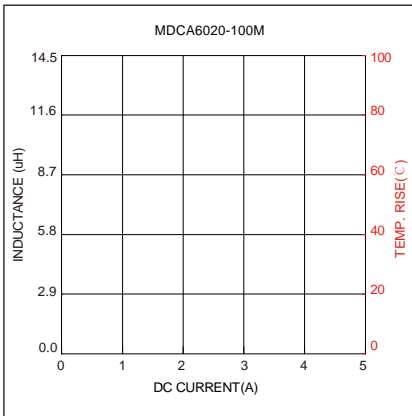
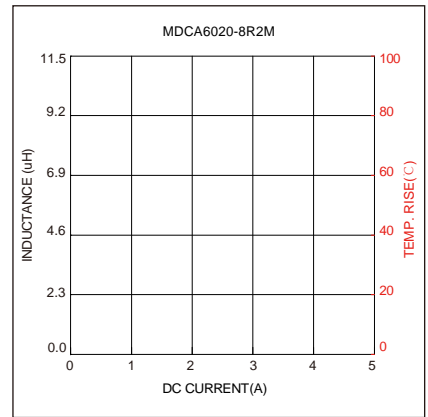
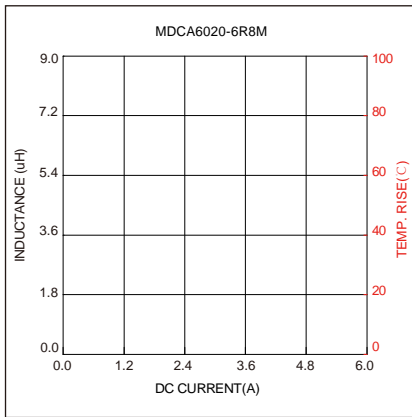
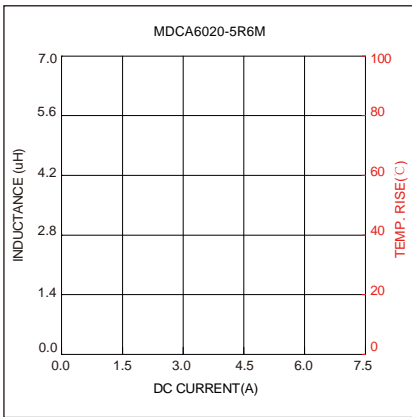
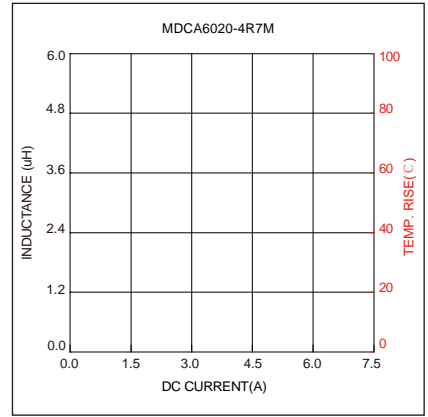
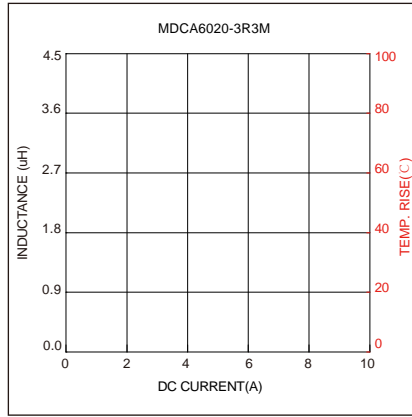
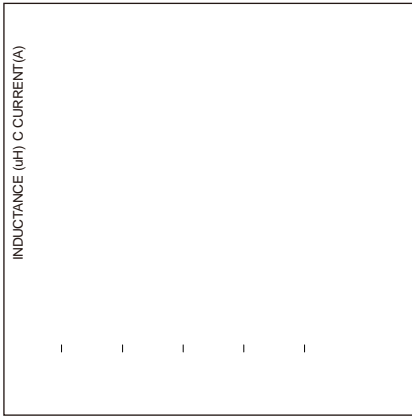
	(μH)		Saturation		($\text{m}\Omega$)	($\text{m}\Omega$)
	10.0		4.0			154
MDCA6020-150M	15.0		3.3			
	22.0		2.5			

Saturation Current will cause L to drop approximately 30%

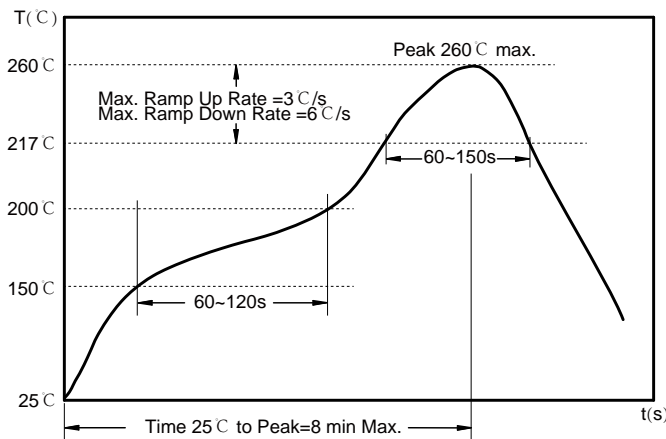
Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T=40^\circ\text{C}$

Typical Electrical Characteristics:





Soldering Reflow:



Preheat condition: 150 ~200°C / 60~120 sec.

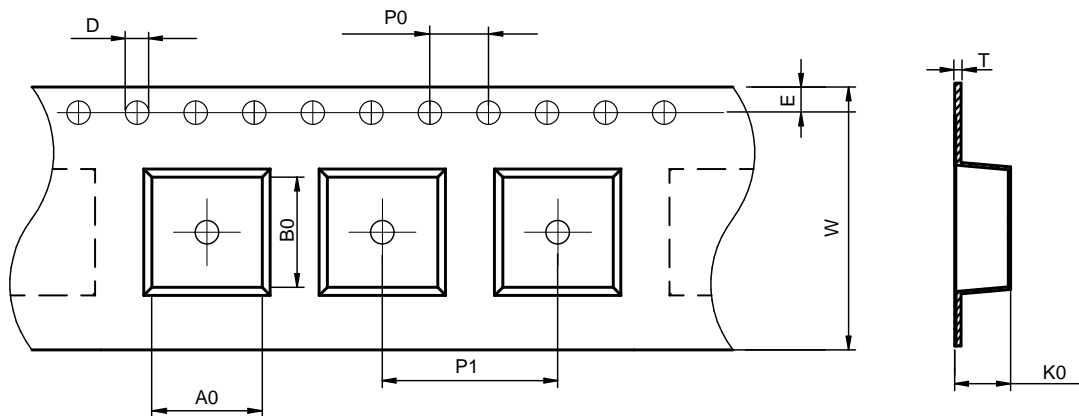
Allowed time above 217°C : 60~150 sec.

Max temperature: 260°C .

Allowed Reflow time: 2x max.

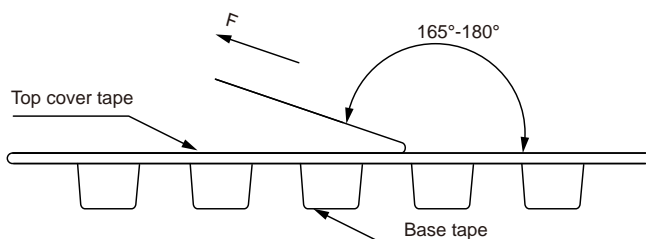
Packaging Information:

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:

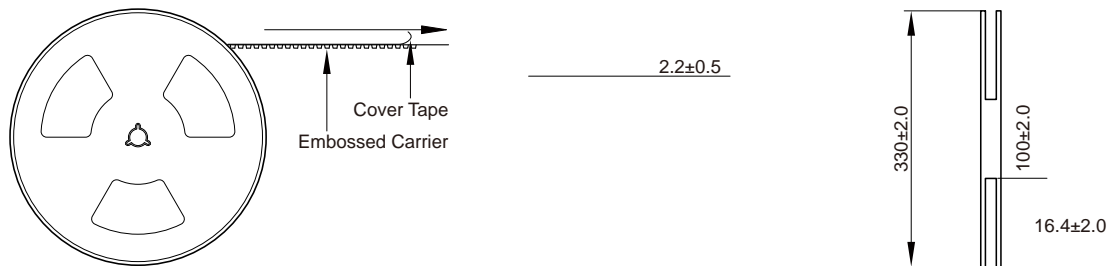


The peel force of top cover tape shall be between 0.1 to 1.3 N

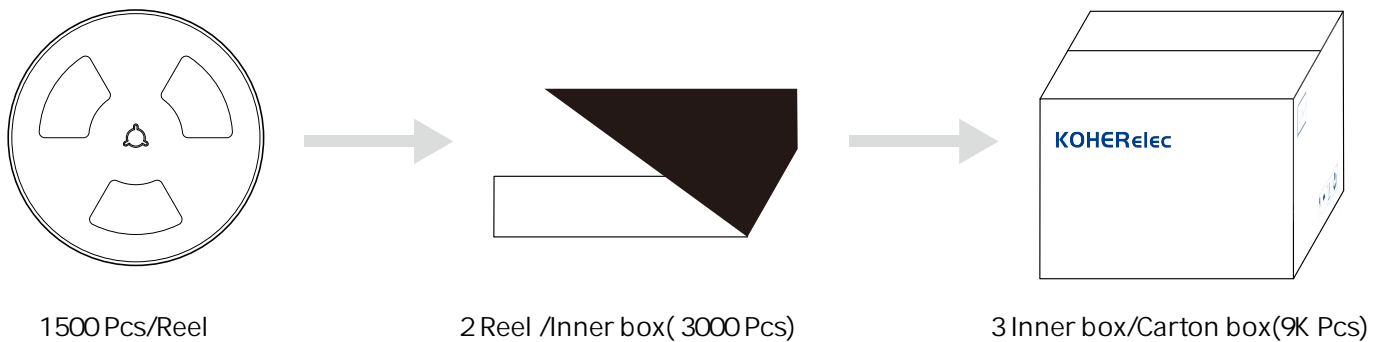
Product Marking:

Marking	Printing Inductance+period)
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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.[Label](#)