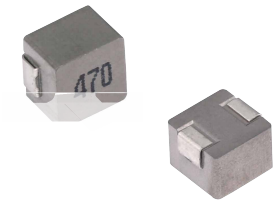
MDE Series

Molding Power Inductors
Size 0630



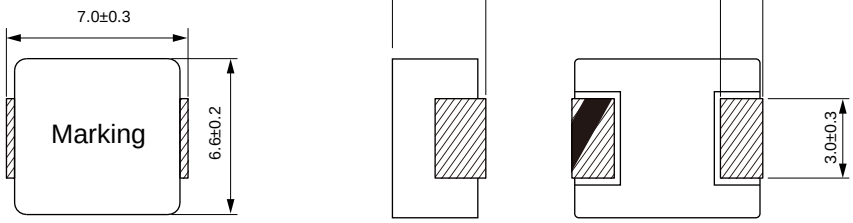
FEATURES

-
-
- ℃ maximum total temperature opera on
-
- Ultra low buzz noise due to molding construc on
-
- Opera ng temperature range - 55 °C to + 125 °C
- Quan ty: 1500pcs

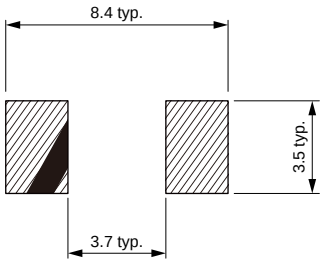
APPLICATION

- Laptops and PCs
-
- Base sta ons
- DC/DC converters
- Ba ery powered devices
-

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

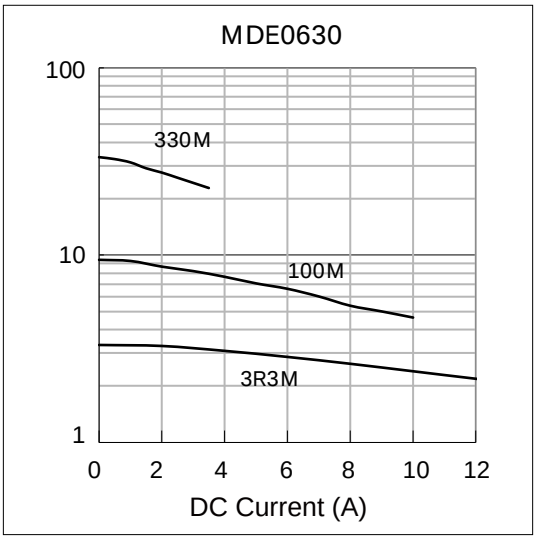
	(µH)		(mΩ)	Saturation	
MDE0630-R22M	0.22	±20%	3.00	34.0	24.0
MDE0630-R33M	0.33	±20%	3.50	25.0	21.0
MDE0630-R47M	0.47	±20%	4.10	20.0	18.0
MDE0630-R56M	0.56	±20%	4.50	18.0	
MDE0630-R68M	0.68	±20%	5.30	17.0	16.0
MDE0630-R82M	0.82	±20%	6.00	16.0	14.0
MDE0630-1R0M	1.00	±20%	7.40	15.0	12.0
MDE0630-1R5M	1.50	±20%		12.0	12.0
MDE0630-2R2M	2.20	±20%	15.0	10.0	9.50
MDE0630-3R3M	3.30	±20%	22.0	9.50	8.50
MDE0630-4R7M	4.70	±20%	33.0	9.00	6.00
MDE0630-5R6M	5.60	±20%	42.0	6.50	5.50
MDE0630-6R8M	6.80	±20%	48.0	6.00	5.00
MDE0630-8R2M	8.20	±20%	60.0	5.50	5.00
MDE0630-100M	10.0	±20%	68.0	5.50	4.50
MDE0630-150M	15.0	±20%		4.00	3.00

	(μH)		(mΩ)	Saturation	
MDE0630-220M	22.0	±20%	170	3.00	2.50
MDE0630-330M	33.0	±20%	270	2.50	2.00
MDE0630-470M	47.0	±20%		2.00	1.50

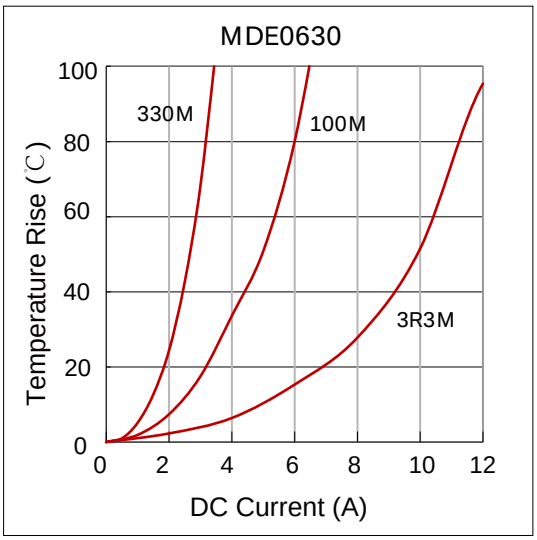
Saturation Current will cause L to drop approximately 30%
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

Typical Electrical Characteristics:

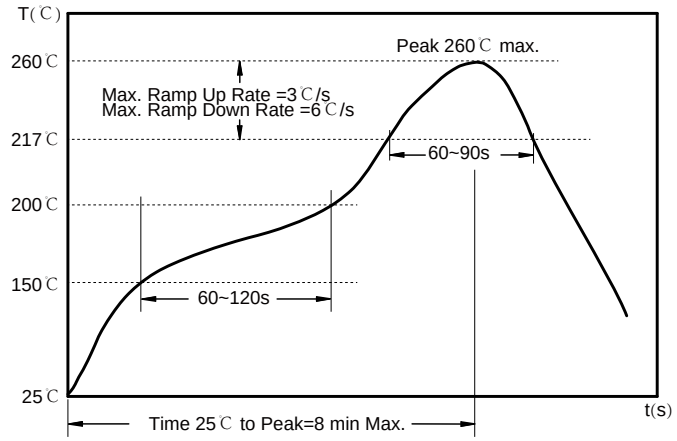
Inductance vs DC Current Characteristics:



Temperature Rise vs DC Current Characteristics:



Soldering Reflow:



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

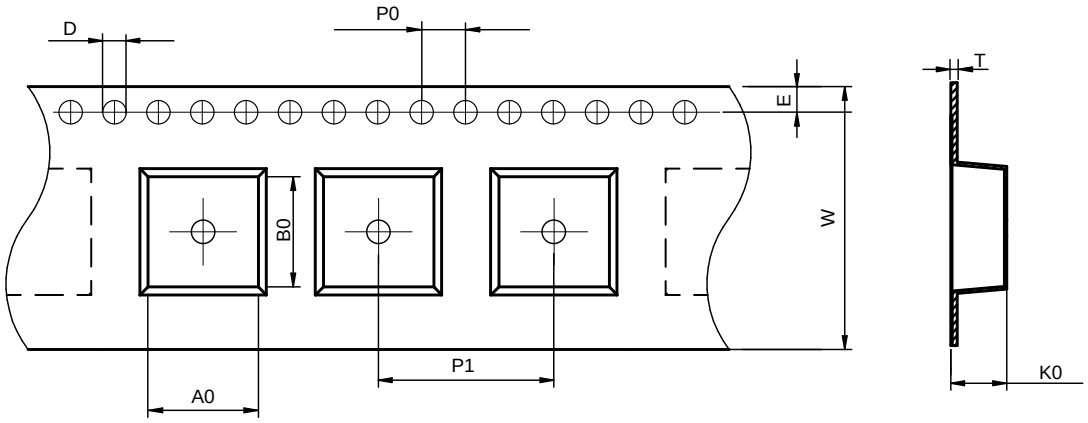
Allowed time above 217℃: 60~90 sec.

Max temperature: 260℃.

Max time at max temperature: 10 sec.

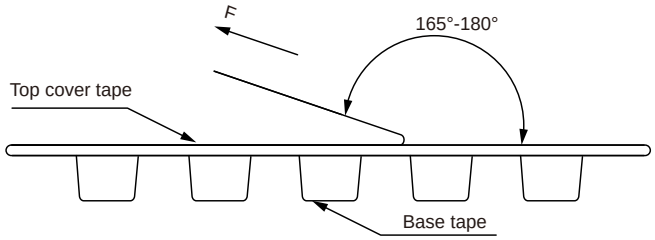
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
0630	7.0±0.1	7.7±0.1	1.5±0.1	4.0±0.1	12.0±0.1	16.0±0.1	1.35±0.1	1.75±0.1	0.35±0.05

Peel force of top cover tape:

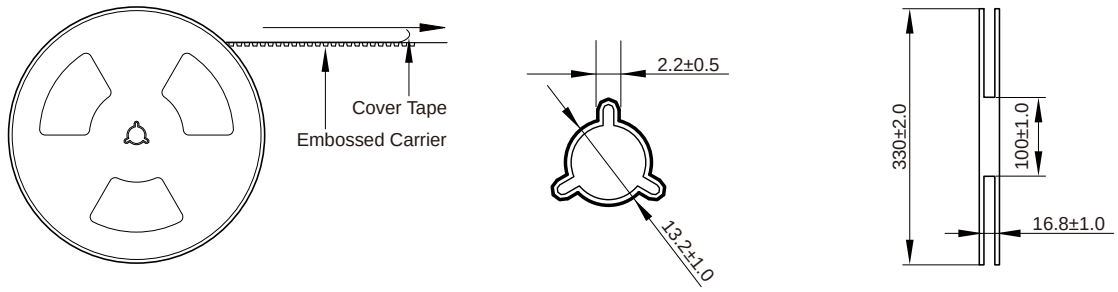


The peel force of top cover tape shall be between 0.1 to 1.3 N

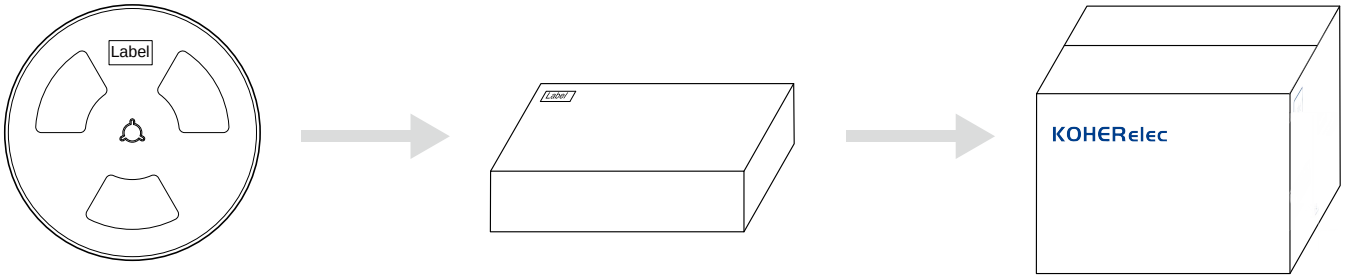
Product Marking:

Marking	Printing (Inductance)

Reel Dimension：[mm]



Packaging Quantity:



1500 Pcs/Reel

2 Reel /Inner box(3K 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 condi-

  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.