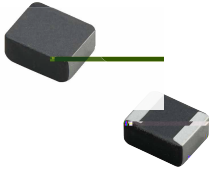




# MDE Series

## Molding Power Inductors

### Size 201610S



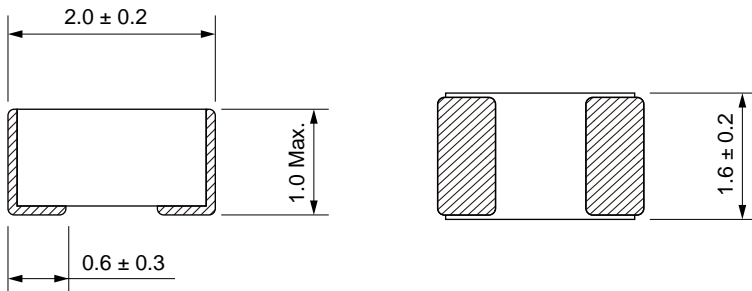
#### FEATURES

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- 
- 
- and lower temperature rising.
- Low Profile.
- Magnetically shielded structure to accomplish high resolution in EMC protection.
- Halogen free, Lead Free, RoHS Compliance.
- Operating temperature: -40 to +125 °C
- Quantity: 3000PCS

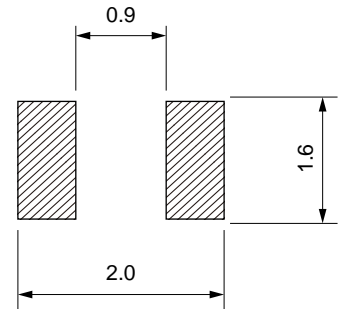
#### APPLICATION

- Generic in portable DC to DC converter line.
- Smart phone, PAD
- DC/DC converter
- Thin-type power supply module.

#### Dimensions: [mm]



#### Land Pattern: [mm]



#### Electrical Properties:

Part No	Inductance @ 1MHz/1V	Tolerance	DC Resistance Typ.	DC Resistance Max.	Current Typ.	Current Max.	Temperature Rise Current Typ.	Temperature Rise Current Max.
MDE201610S-R10M	0.10	±20%	7	11	12.2	11.0	9.5	9.0
MDE201610S-R22M	0.22	±20%	15	19	7.9	7.0	6.5	6.0
MDE201610S-R24M	0.24	±20%	17	20	6.8	6.3	5.8	5.3
MDE201610S-R33M	0.33	±20%	21	26	6.7	6.1	4.7	4.2
MDE201610S-R47M	0.47	±20%	23	30	6.1	5.3	4.5	4.1
MDE201610S-R68M	0.68	±20%	40	47	4.7	4.2	4.0	3.5
MDE201610S-1R0M	1.00	±20%	48	60	3.9	3.3	3.2	3.0
MDE201610S-1R5M	1.50	±20%	86	99	3.4	3.1	2.4	2.2
MDE201610S-2R2M	2.20	±20%	117	140	2.6	2.45	2.2	2.0
MDE201610S-4R7M	4.70	±20%	240	288	1.8	1.6	1.3	1.1

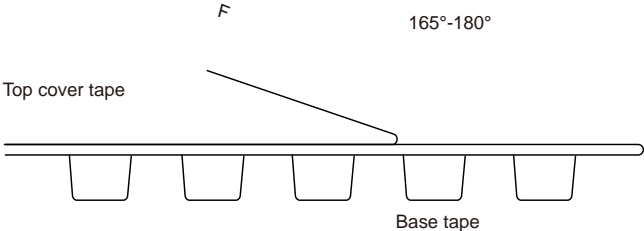
Temperature rising current will cause the coil temperature approximate  $T+40^{\circ}\text{C}$   
 Saturation current will cause to drop approximately 30%



Packaging Information:

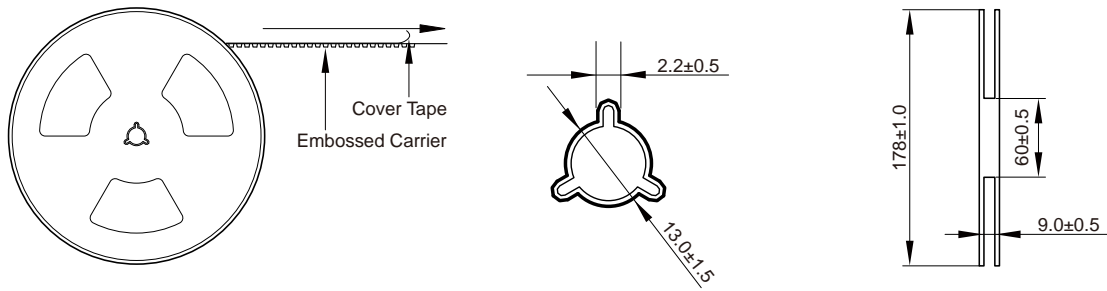
Tape Dimension:

Peel force of top cover tape:

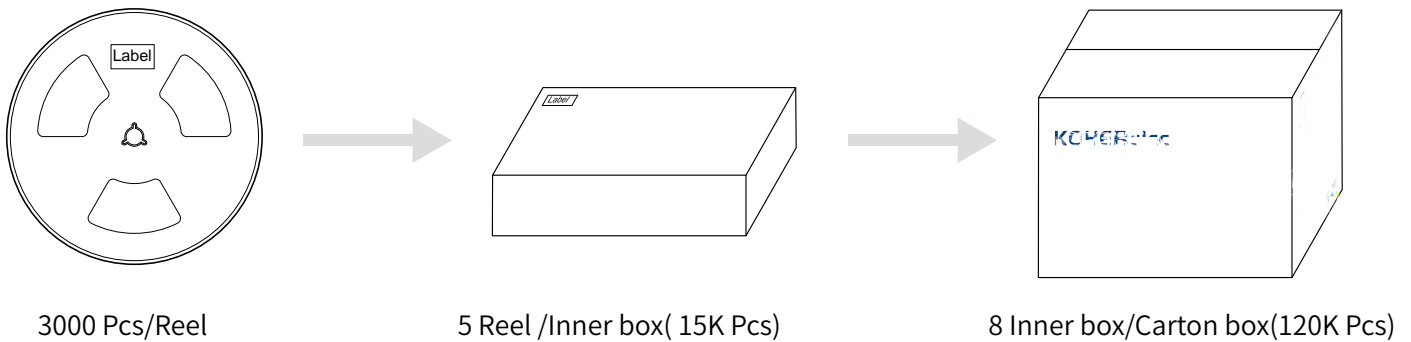




## Reel Dimension: [mm]



## 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.