

#### **MDE Series**

## Molding Power Inductors Size 1265



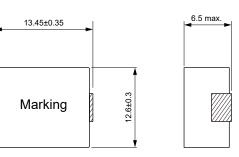
#### **FEATURES**

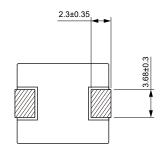
- ROHS, Halogen Free and REACH compliance
- High rated current
- 125 <sup>°</sup>C maximum total temperature operation
- Low core loss
- Ultra low buzz noise due to molding construction
- 13.8×12.9×6.5mm maximum surface mount package
- Operating temperature range 55 °C to + 125 °C
- Quantity: 500pcs

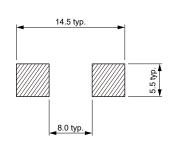
#### **APPLICATION**

- Laptops and PCs
- Switch and servers
- Base stations
- DC/DC converters
- Battery powered devices
- SSD modules

Dimensions: [mm]







Land Pattern: [mm]

## **Electrical Properties:**

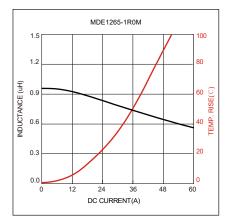
Part No	Inductance @ 100kHz/0.25V (μΗ)	Tolerance	DC Resistance Max. (mΩ)	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	
MDE1265-1R0M	1.0	±20%	1.75	34	28	

Saturation Current will cause L to drop approximately 30%

Temperature Rise Current: The actual value of DC current when the temperature rise is  $\triangle T$ =40°C

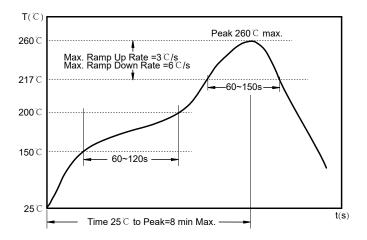


## Typical Electrical Characteristics:





## Soldering Reflow:



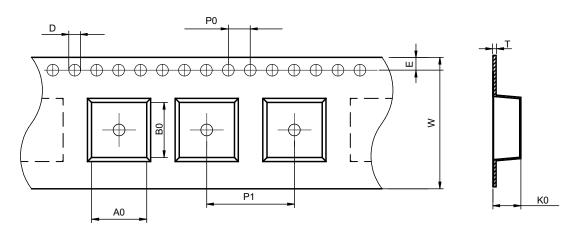
Preheat condition: 150 ~200  $^{\circ}\text{C}$  / 60~120 sec.

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

Max temperature: 260 ℃.

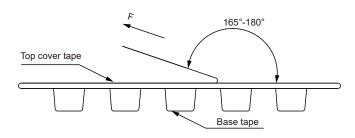
## Packaging Information:

## Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDE1265-1R0M	13.1±0.1	14.0±0.1	1.5±0.1	4.0±0.1	16±0.1	24±0.3	6.7±0.1	1.75±0.1	0.50±0.05

## Peel force of top cover tape:



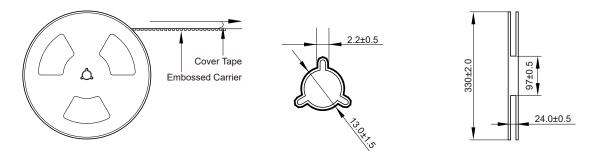
The peel force of top cover tape shall be between 0.1 to 1.3 N

## **Product Marking:**

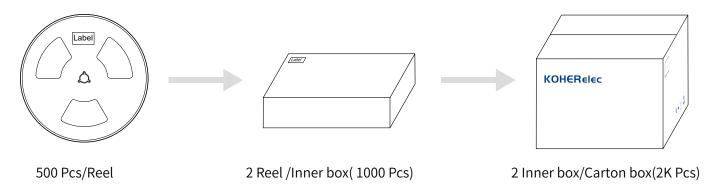
Marking	1R0
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### Reel Dimension: [mm]



#### 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.