

#### **MDA Series**

# SMD Low Profile High Current Molded Inductor Size 7040

#### **FEATURES**

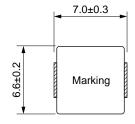
- Shielded construc on
- -
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- Ultra low buzz noise, due to composite construc on.
- AEC-Q200 qualified
- Opera ng temperature: -55 to +155 °C (including self-temperature rise)
- Quan ty: 1000PCS

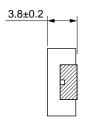
#### **APPLICATION**

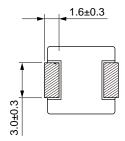
- Headlamps, tail lamps and interior ligh ng
- Doors, windowli and seat control
- •
- In-Vehicle Infotainment and naviga on

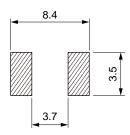
Dimensions: [mm]

Land Pattern: [mm]









# **Electrical Properties:**

Part No	Inductance @ 100KHz/1V (μΗ)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance Max. (mΩ)

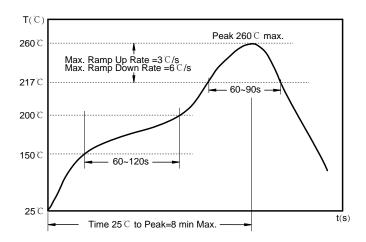


Part No	Inductance @ 100KHz/1V (μΗ)	Tolerance	Temperature Rise Current Typ. (A)	Saturation Current Typ. (A)	DC Resistance Max. (mΩ)	

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



# Soldering Reflow:



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

Allowed time above 217°C: 60~90 sec.

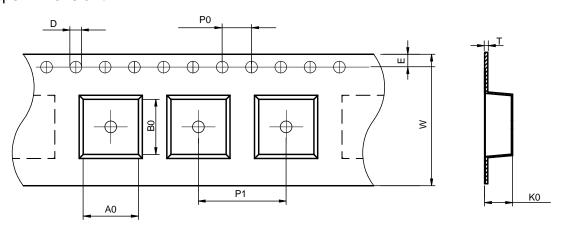
Max temperature: 260 ℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

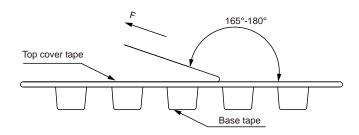
# Packaging Information:

# Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDA7040	6.9± 0.1	7.5± 0.1	1.5± 0.1	4.0± 0.1	12.0± 0.1	16.0± 0.3	4.3± 0.1	1.75± 0.1	0.40± 0.05

#### Peel force of top cover tape:



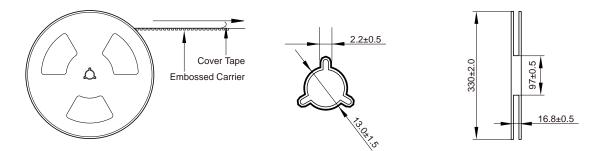
The peel force of top cover tape shall be between 0.1 to 1.3 N

# **Product Marking:**

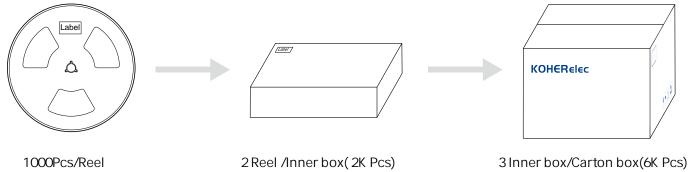
Marking K+Printing Inductance+period)	
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#### Reel Dimension: [mm]



#### 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.