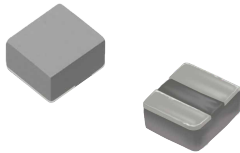


**MDA Series**  
**SMD Low Profile High Current Molded Inductor**  
**Size 252010**

**FEATURES**

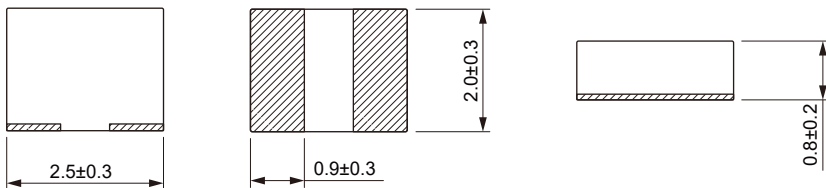
- High current, low DCR, high efficiency.
- Very low acoustic noise and very low leakage flux noise.
- AEC-Q200 qualified
- 100% Lead(Pb)-Free and RoHS compliant.
- Operating temperature: -55 to +150 °C (including self-temperature rise)
- Quantity: 3000PCS



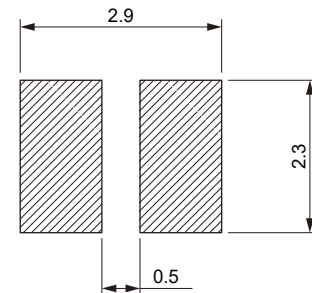
**APPLICATION**

- 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]**



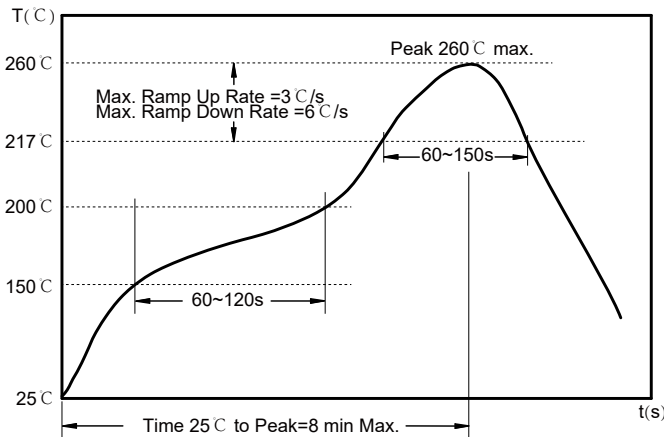
**Electrical Properties:**

Part No	Inductance @ 1MHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA252010-R33M	0.33	±20%	6.6	6.2	7.6	7.2	13	17
MDA252010-R68M	0.68	±20%	5.6	5.0	5.9	5.5	23	27
MDA252010-1R0M	1.00	±20%	4.5	4.1	5.3	4.8	24	28
MDA252010-2R2M	2.20	±20%	2.9	2.6	3.4	3.0	57	66
MDA252010-3R3M	3.30	±20%	2.5	2.2	2.8	2.5	86	100
MDA252010-4R7M	4.70	±20%	2.0	1.6	2.6	2.0	180	216
MDA252010-100M	10.0	±20%	1.2	1.1	1.6	1.4	490	520

Saturation Current will cause L to drop approximately 30%

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

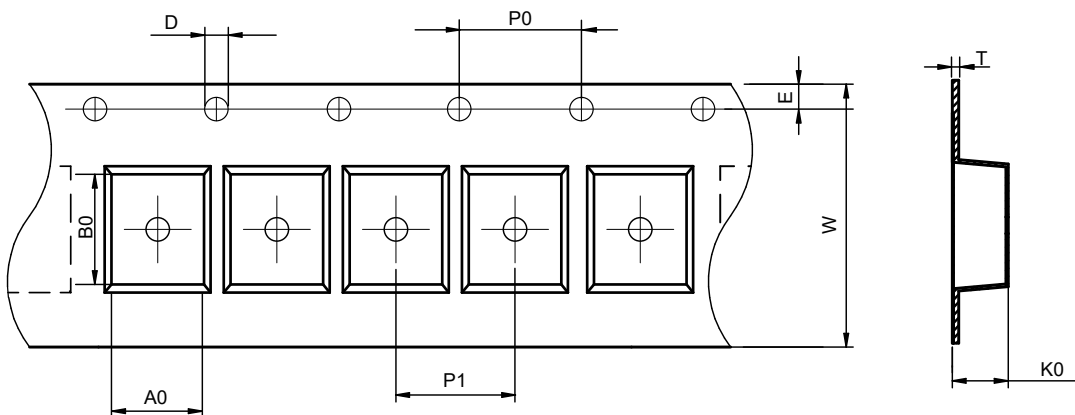
Soldering Reflow:



Preheat condition: 150 ~200°C / 60~120 sec.  
 Allowed time above 217°C : 60~150 sec.  
 Max temperature: 260°C .  
 Allowed Reflow time: 3x max.

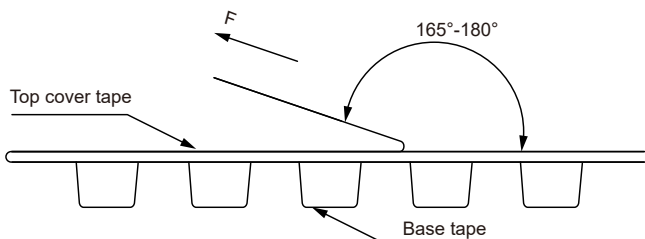
Packaging Information:

Tape Dimension:



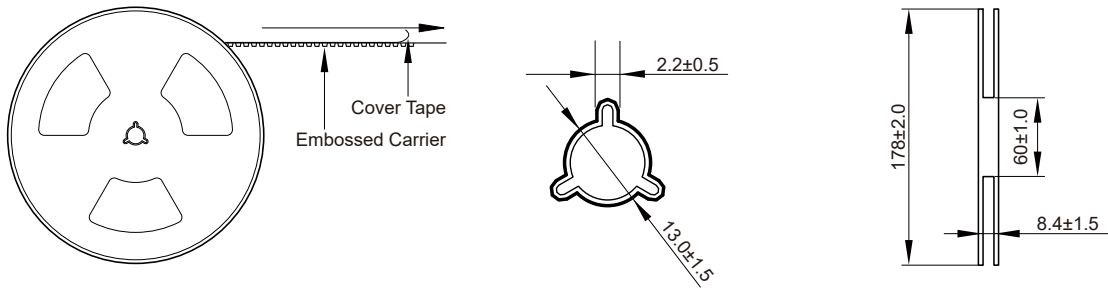
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDA252010	2.4±0.1	2.9±0.1	1.5±0.1	4.0±0.1	4.0±0.1	8.0±0.3	1.2±0.1	1.75±0.1	0.25±0.05

Peel force of top cover tape:

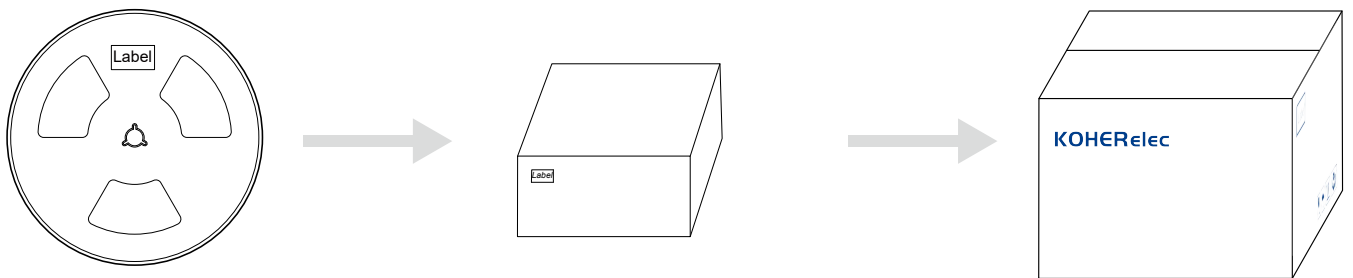


The peel force of top cover tape shall be between 0.1 to 0.98 N

Reel Dimension: [mm]



Packaging Quantity:



3000 Pcs/Reel

5 Reel /Inner box( 15K Pcs)

8 Inner box/Carton box(120K Pcs)

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.