

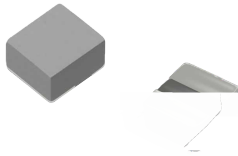
# MDA Series

## SMD Low Profile High Current Molded Inductor

### Size 252010

#### FEATURES

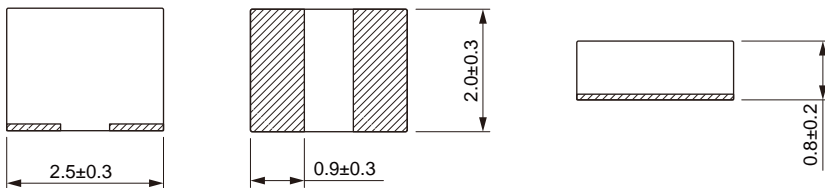
- High current, low DCR, high efficiency.
- Very low acoustic noise and very low leakage flux noise.
- AEC-Q200 qualified
- 100% Lead(Pb)-Free and RoHS compliant.
- Operating temperature: -55 to +150 °C (including self-temperature rise)
- Quantity: 3000PCS



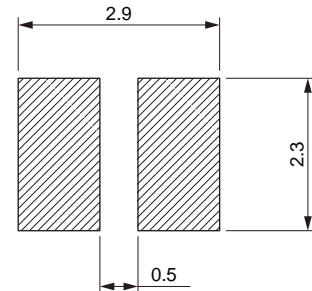
#### APPLICATION

- 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:

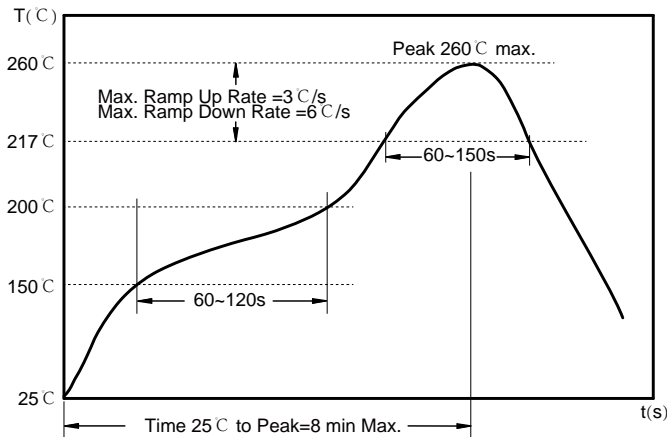
Part Number	DCR (mΩ)	Inductance (μH)	DCR (mΩ)	Inductance (μH)	DCR (mΩ)	Inductance (μH)	DCR (mΩ)	Inductance (μH)	DCR (mΩ)	Inductance (μH)
MDA252010-R33M	0.33	±20%	6.6	6.2	7.6	7.2	13	17		
MDA252010-R68M	0.68	±20%	5.6	5.0	5.9	5.5	23	27		
MDA252010-1R0M	1.00	±20%	4.5	4.1	5.3	4.8	24	28		
MDA252010-2R2M	2.20	±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  $\Delta T=40^{\circ}\text{C}$



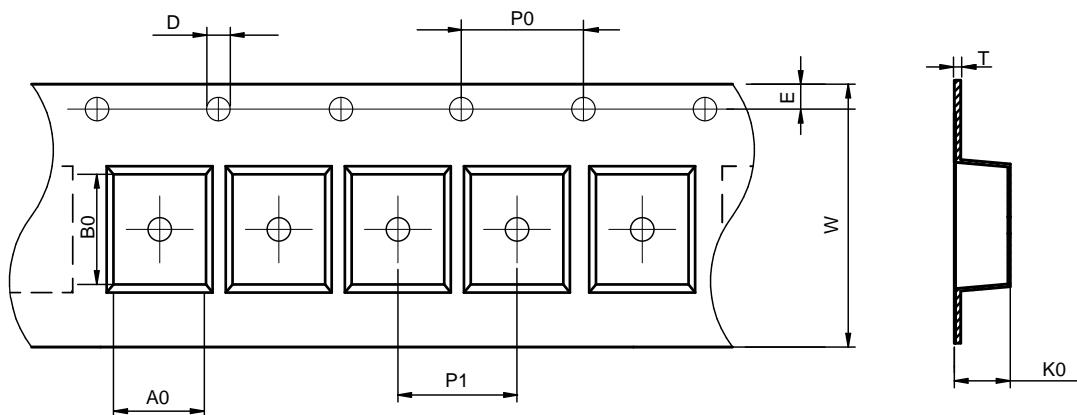
## Soldering Reflow:



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.

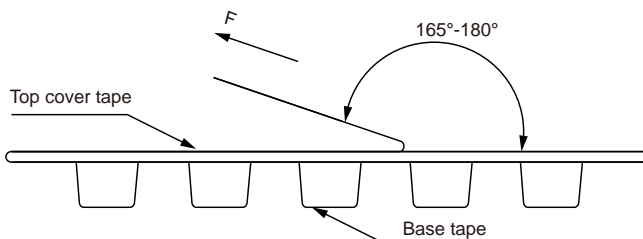
## Packaging Information:

### 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

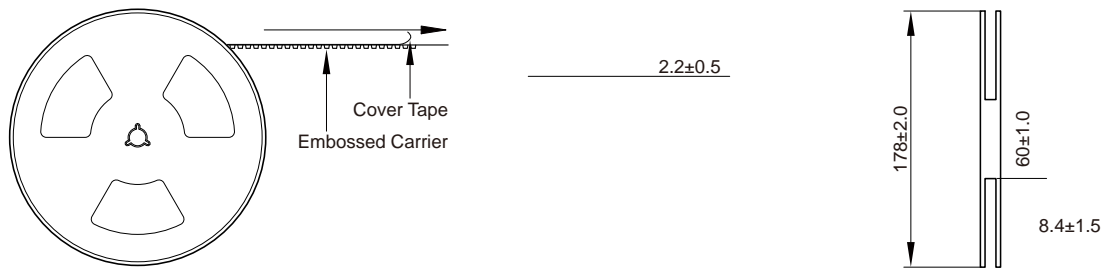
### Peel force of top cover tape:



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



### Reel Dimension: [mm]



### Packaging Quantity:

## 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  $35^{\circ}\text{C}$ , 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 sei.144 0-1..i4 0-1..i4 0rmdete.Tignease always handBe1.. fior he lr a 35whenactu) reques038ioncge omeraure d
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