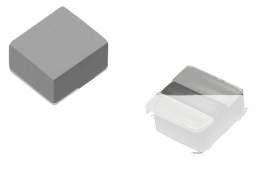
MDTA Series

SMD Low Profile High Current Molded Inductor

Size 25201B



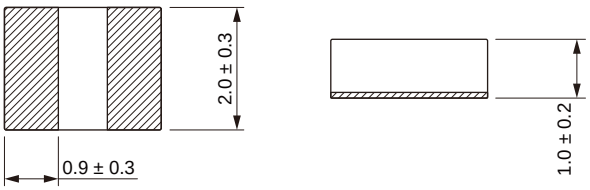
FEATURES

- High current, low DCR,high e ciency.
- Very low acous c noise and very low leakage flux noise.
- AEC-Q200 qualified
- 100% Lead(Pb)-Free and RoHS compliant.
- Opera ng temperature: -55 to +155 °C (including self-temperature rise)
- Quan ty: 3000PCS

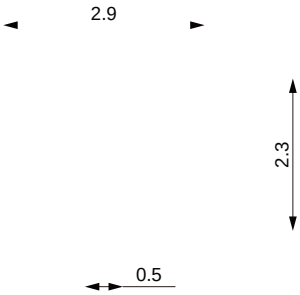
APPLICATION

- ADAS
- Headlamps, tail lamps and interior ligh ng
- HVAC
- Doors, window li and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and naviga on

Dimensions: [mm]



Land Pattern: [mm]



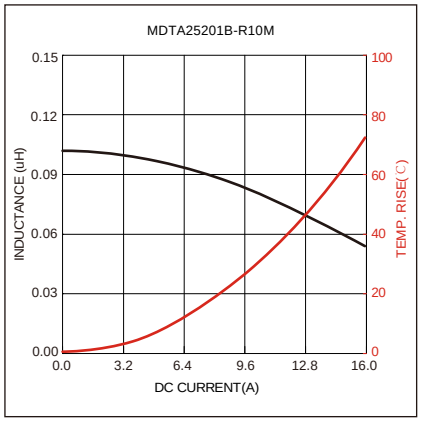
Electrical Properties:

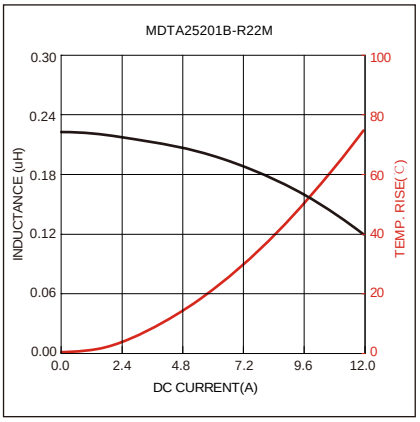
Part No	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
t (Temperature Rise Current Max.)	0.22	0.33	0.68	1.0	1.2	2.2	3.3	4.7	6	10.0	1
	8.0	12.0	10.0	4.0	7.0				
	7.6	9.6	9.0	9.0	10.8				
	6.4	8.0	7.5	10	12				
	6.0	7.4	6.8	16	20				
	5.5	6.5	6.0	19	23				
	5.2	5.8	5.3	31	37				
	4.2	4.7	4.4	27	32				
	3.3	4.0	3.3	52	60				
	2.5	3.0	2.7	80	97				
	2.0	2.8	2.2	170	204				
	1.4	2.0	1.7	245	270				
	1.05	1.6	1.45	330	400				

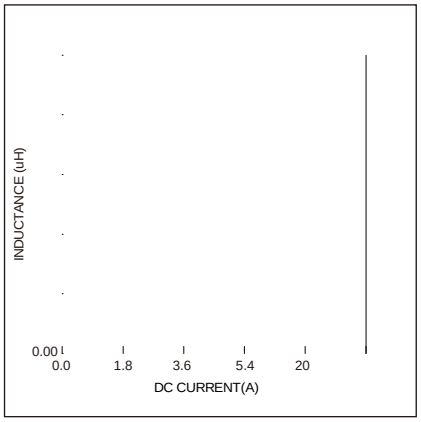
Saturation Current will cause L to drop approximately 30%

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

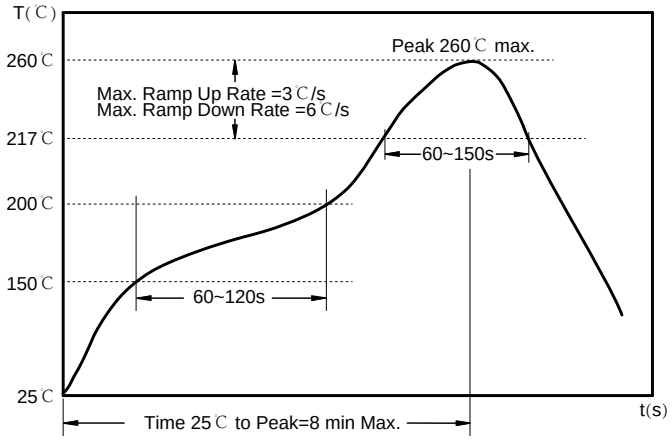
Typical Electrical Characteristics:







Soldering Reflow:



Preheat condition: 150 ~200℃/ 60~120 sec.

Allowed time above 217℃: 60~150 sec.

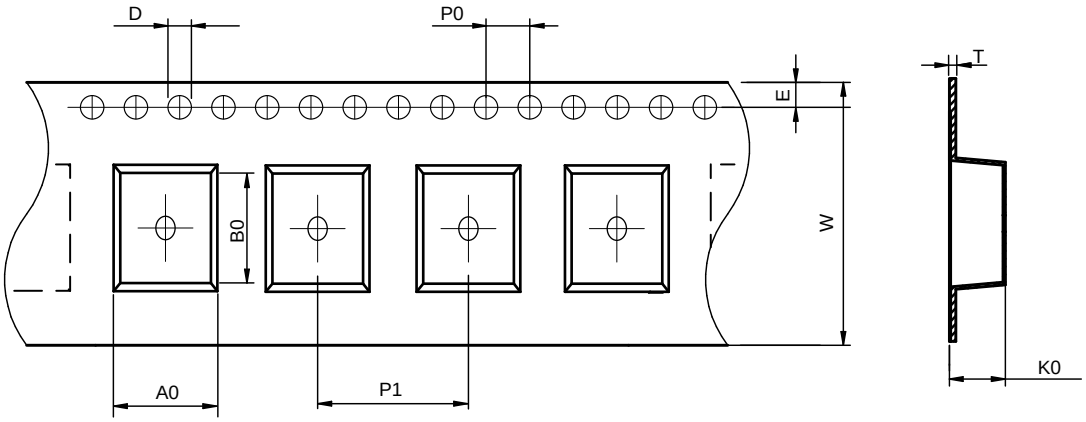
Max temperature: 260℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 3x max.

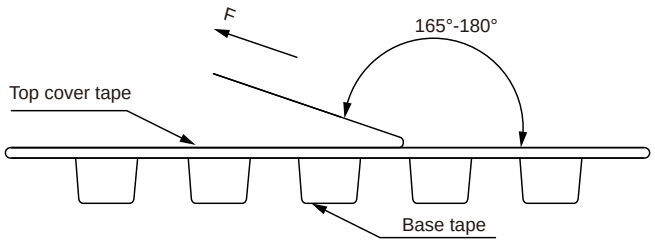
Packaging Information:

Tape Dimension:



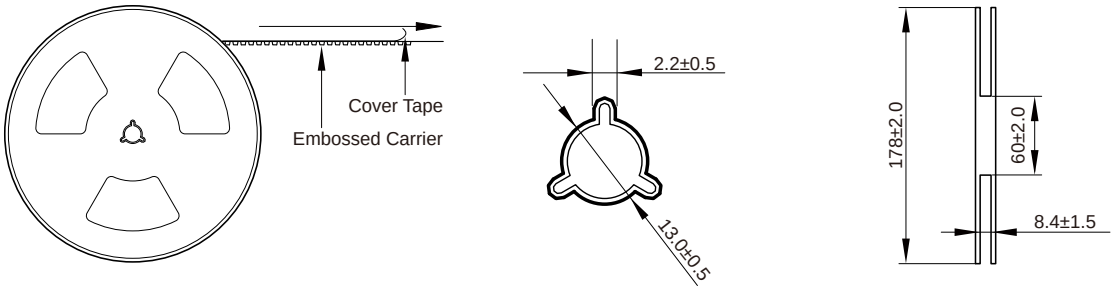
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTA25201B	2.4±0.1	2.9±0.1	1.5±0.1	4.0±0.1	4.0±0.1	8.0±0.1	1.4±0.1	1.75±0.1	0.25±0.05

Peel force of top cover tape:

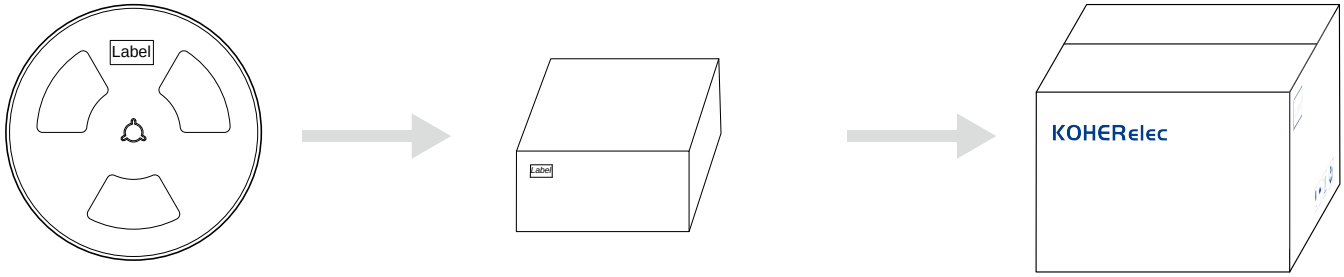


The peel force of top cover tape shall be between 0.1 to 0.98 N

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.
- 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.