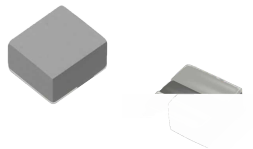
MDTA Series

SMD Low Profile High Current Molded Inductor

Size 32251B



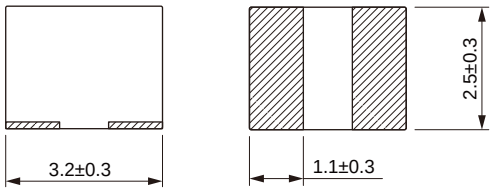
FEATURES

- , ,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

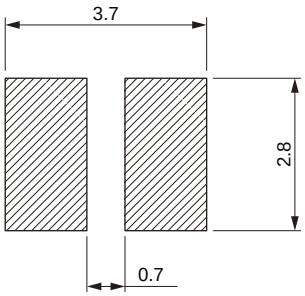
APPLICATION

- ADAS
- Headlamps, tail lamps and interior ligh ng
-
- 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	Inductance @ 100KHz/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)
MDTA32251B-R22M	0.22		9.5	9.0	9.3	8.7	7.4	8.5
MDTA32251B-R33M	0.33		8.5	8.0	9.2	8.6	9.0	
MDTA32251B-R47M	0.47		7.1	6.6	8.3	7.5	17	
MDTA32251B-R68M	0.68		6.3	5.8	7.4	6.9		24
MDTA32251B-1R0M	1.0		5.7	5.2	6.6	5.8	26	30
MDTA32251B-1R5M	1.5		4.6	4.0	5.3	5.0	40	50
MDTA32251B-2R2M	2.2		4.2	3.7	4.9	4.4	58	70
MDTA32251B-3R3M	3.3		3.2	2.8	3.5	3.1	75	95
MDTA32251B-4R7M	4.7		2.5	2.0	2.9	2.5	115	135
MDTA32251B-6R8M	6.8		2.1	1.8	2.7	2.3	177	
MDTA32251B-100M			1.9	1.6	2.3	2.0	230	264

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

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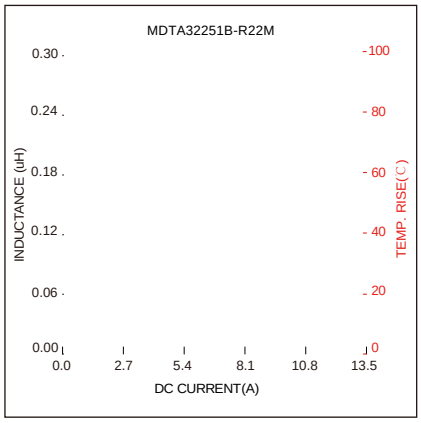
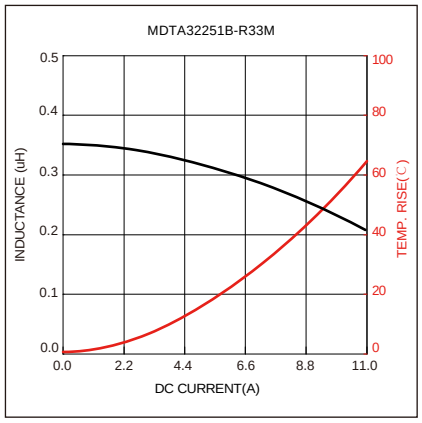
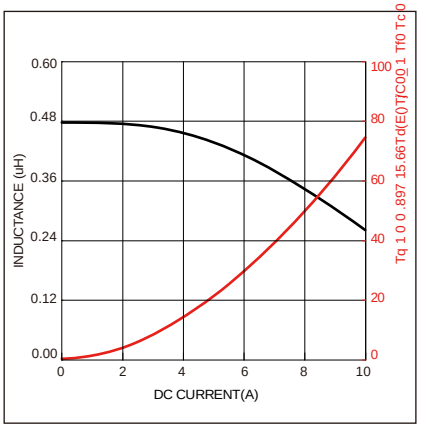
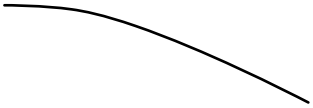
Typical Electrical Characteristics:









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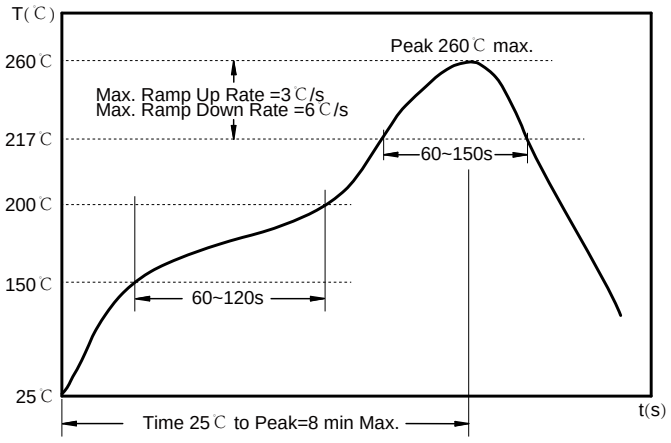
Soldering Reflow:



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

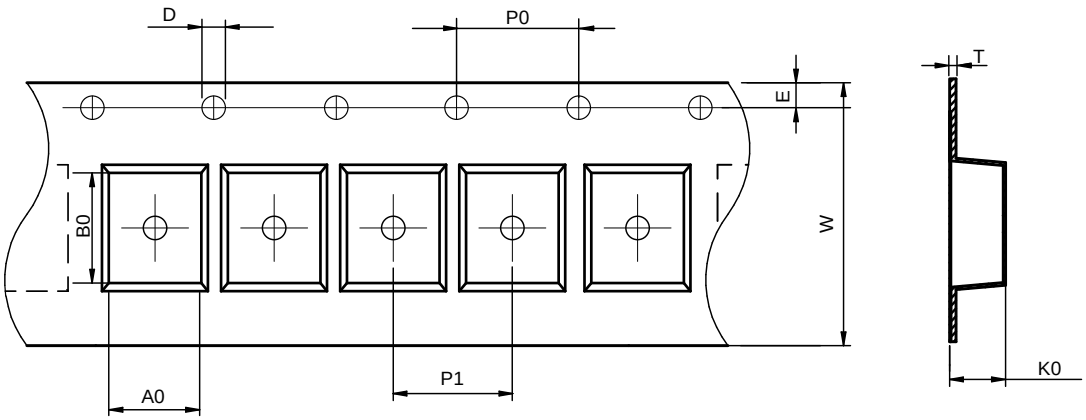
Allowed time above 217℃: 60~150 sec.

Max temperature: 260℃.

Allowed Reflow time: 2x max.

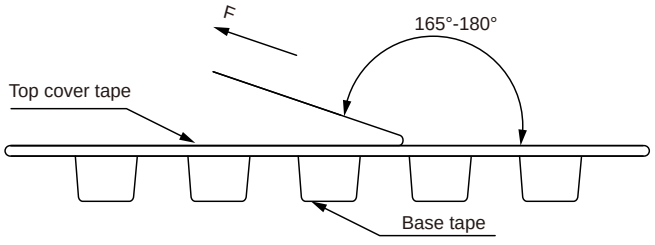
Packaging Information:

Tape Dimension:



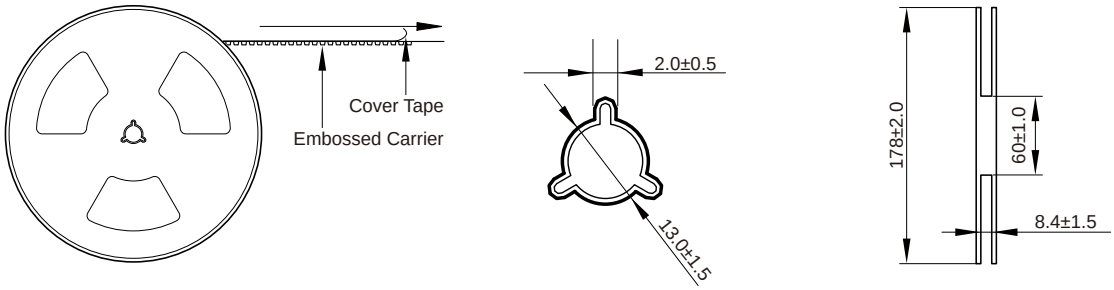
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTA32251B	2.9±0.1	3.6±0.1	1.5±0.1	4.0±0.1	4.0±0.1	8.0±0.1	1.4±0.1	1.75±0.1	0.25±0.05

Peel force of top cover tape:

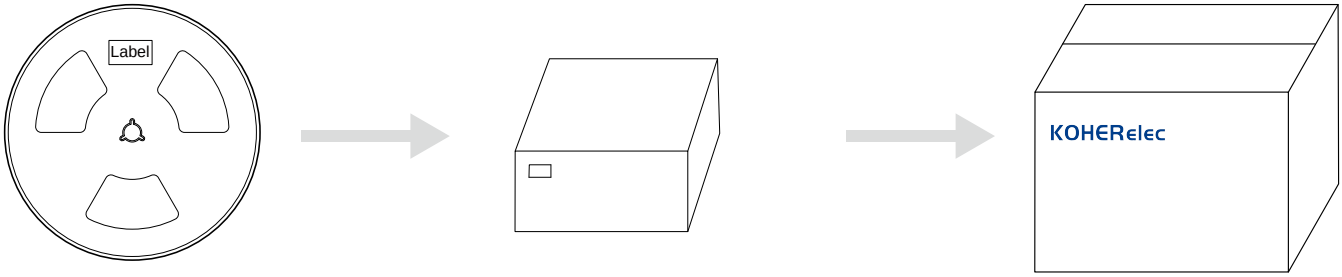


The peel force of top cover tape shall be between 0.1 to 0.98 N

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.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.