

MDA Series SMD Low Profile High Current Molded Inductor Size 8050



FEATURES

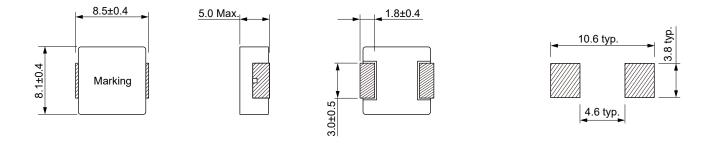
- Low loss realized with low DCR.
- Ultra low buzz noise, due to composite construction .
- 100% Lead(Pb)-Free and RoHS compliant.
- High performance (Isat) realized by metal dust core.
- AEC-Q200 qualified.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 1000PCS

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:

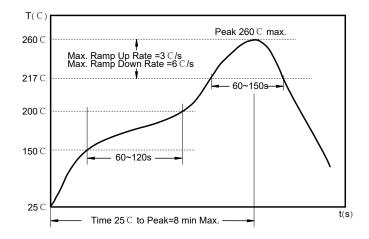
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDA8050-3R3M	3.3	±20%	13.5	12.5	16.3	14.0	9.5	12.0

Saturation Current will cause L to drop approximately 35%

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



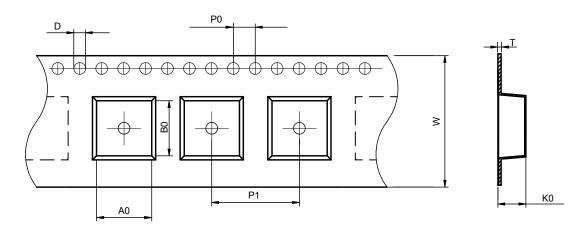
Soldering Reflow:



Preheat condition: $150 \sim 200 \text{ C} / 60 \sim 120 \text{ sec.}$ Allowed time above $217 \text{ C} : 60 \sim 150 \text{ sec.}$ Max temperature: 260 C. Allowed Reflow time: 2x max.

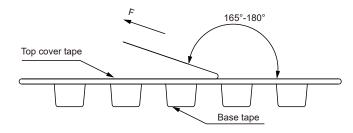
Packaging Information:

Tape Dimension:



Series	A0	B0	D	P0	P1	W	K0	T
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
MDA8050	8.4 typ	9.6 typ	1.5 ± 0.1	4.0±0.1	12.0±0.1	16.0±0.2	5.3 typ	0.35 typ

Peel force of top cover tape:



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

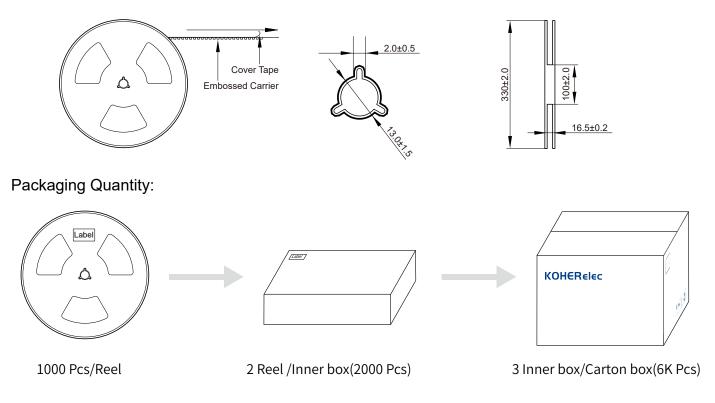
Product Marking:

Marking 3R3

KOHER Electronic 4546 BATES DRIVE, YORBLINDA CA 92886 USA 714-325-4789 Contact@kohergroup.com

KOHERelec

Reel Dimension: [mm]



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.