

MDSA Series

SMD Low Profile High Current Molded Inductor

Size 5030

FEATURES

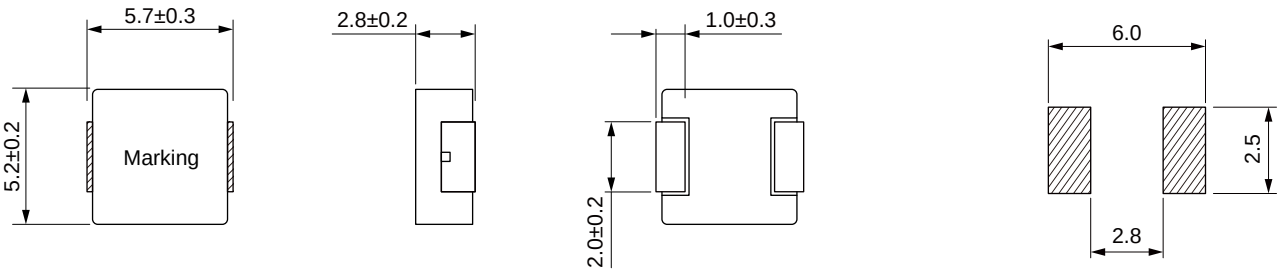
- Shielded construction
- Capable of corresponding high frequency .
- Low loss realized with low DCR.
- High performance (Isat) realized by metal dust core.
- Ultra low buzz noise, due to composite construction.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified
- Operating temperature: -55 to +155 °C(including self-temperature rise)
- Quantity: 2000PCS

APPLICATION

- Noise filter for various drive circuitry requiring high temp.
- f (mm)3.95
- (mΩ)

Dimensions: [mm]

Land Pattern: [mm]



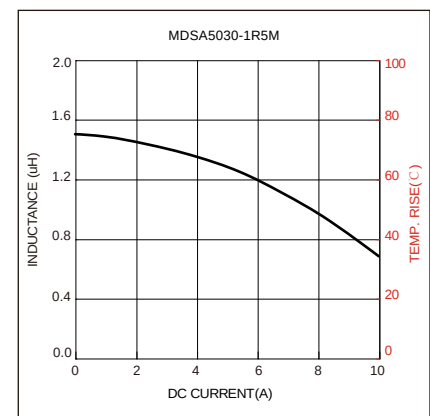
Electrical Properties:

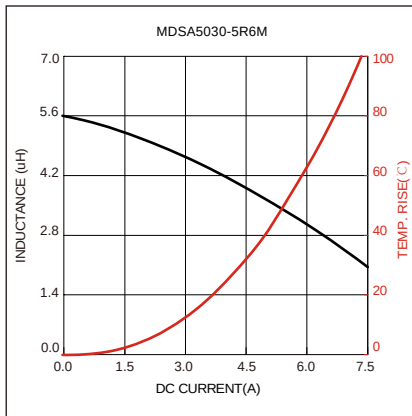
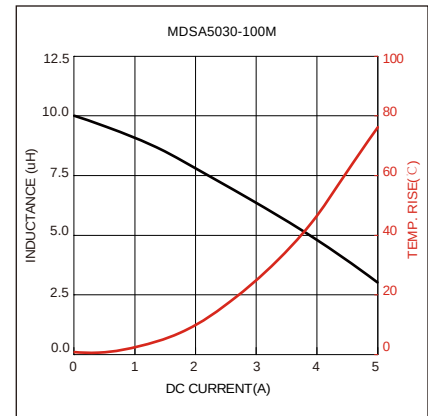
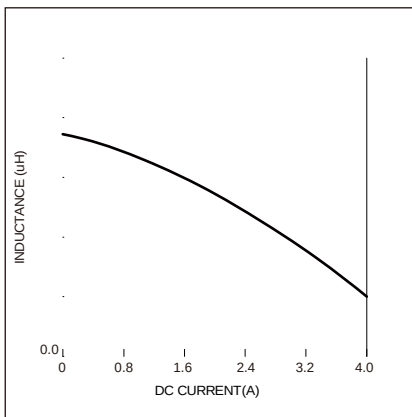
Part No	Inductance @100KHz/1V (μH)			Temperature Rise Current Max. (A)	Satura on Current Typ. (A)	Satura on Current Max. (A)		
MDSA5030-R20M	0.20			12.5	20.0	15.4		
MDSA5030-R47M	0.47			11.6	10.0	8.7		
MDSA5030-R68M	0.68			10.6	9.00	7.7		
MDSA5030-R82M	0.82			8.7	8.80	7.4		
MDSA5030-1R0M	1.00			7.7	8.50	7.2		
MDSA5030-1R5M	1.50			6.8	7.50	6.3		
MDSA5030-2R2M	2.20			6.3	6.50	5.6		
MDSA5030-3R3M	3.30			5.6	6.00	5.1		
MDSA5030-4R7M	4.70			4.6	5.30	4.4		

Saturation Current will cause L to drop approximately 30%

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

Typical Electrical Characteristics:

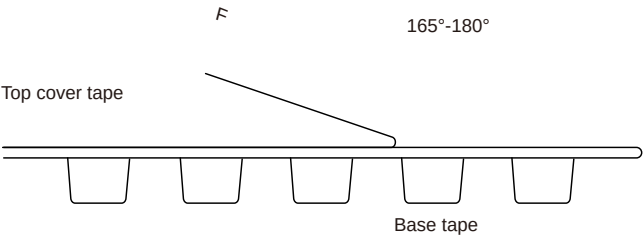




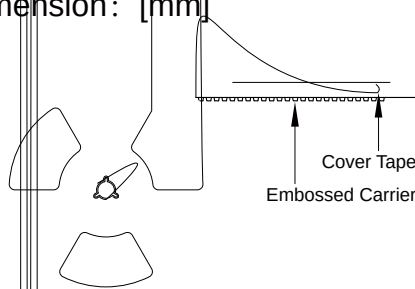
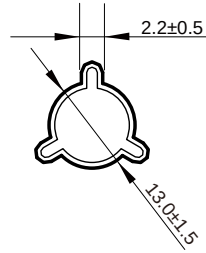
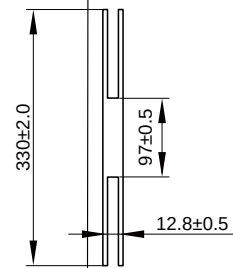
Packaging Information:

Tape Dimension :

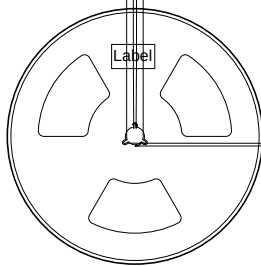
Peel force of top cover tape:



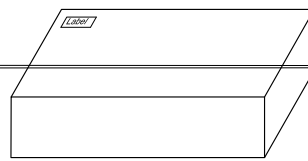
Reel Dimension: [mm]



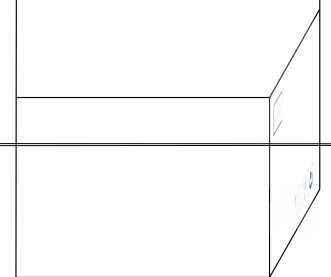
Packaging Quantity:



0... Naq-Pccj



1 Pccj -6 l l cp `mv& 4... Naq'



1 6 l l cp `mv-A\_prm l `mv&/6 l Naq'

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.