

MDSA Series

SMD Low Profile High Current Molded Inductor

Size 1870

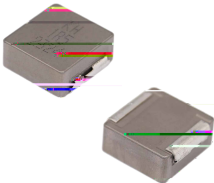


FEATURES

- S t U t u
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- Ultra low buzz noise, due to composite construction.
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- AEC-Q200 qualified
- Operating temperature: -55 to +155 °C(including self-temperature rise)
- Quantity: 200PCS

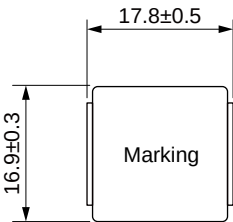
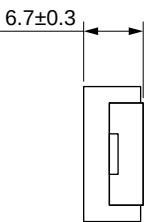
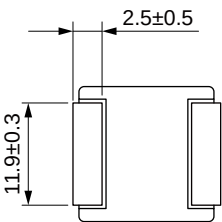
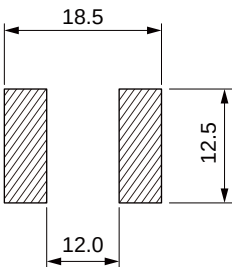
APPLICATION

- Noise filter for various drive circuitry requiring high temp. operation and peak current handling capability
- Boost-Converter
- Buck-Converter DC/DC



Dimensions: [mm]

Land Pattern: [mm]



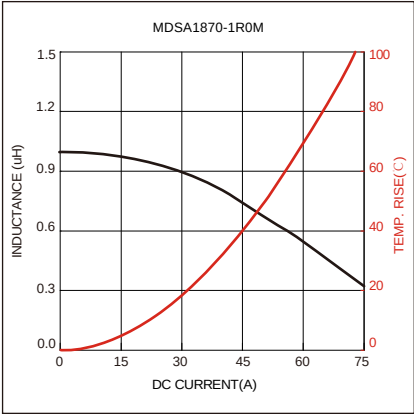
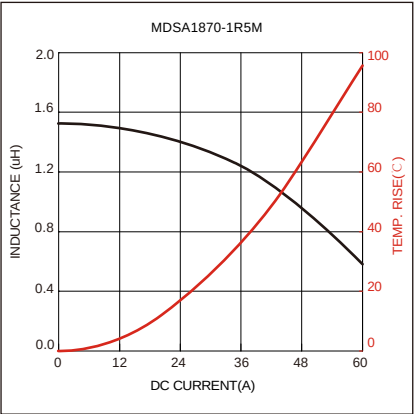
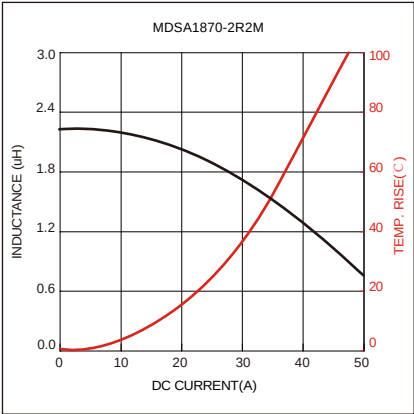
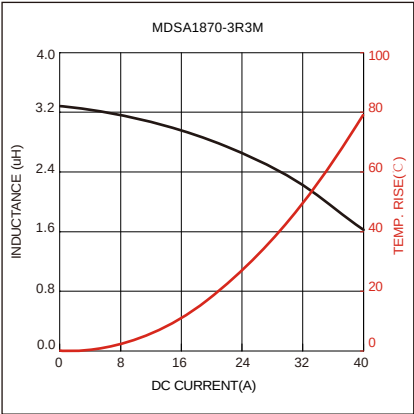
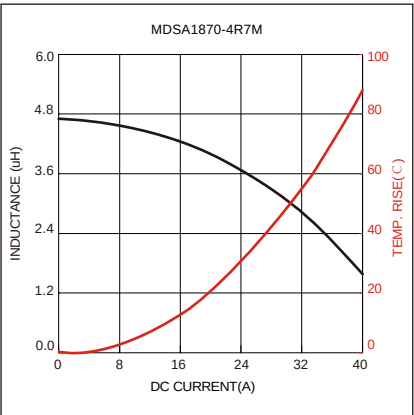
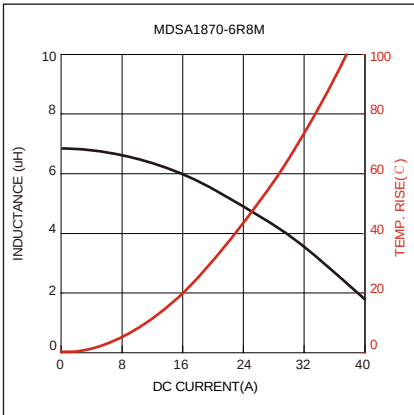
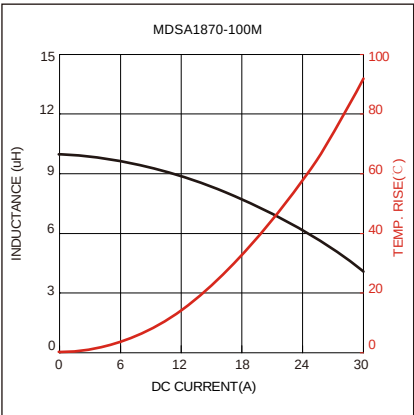
Electrical Properties:

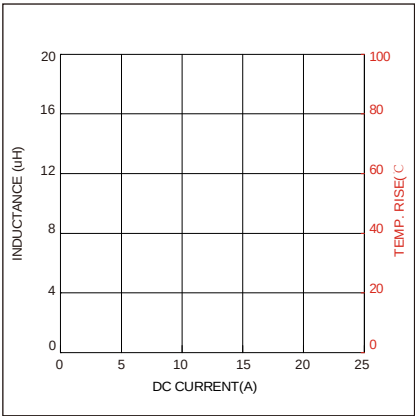
Part No		Tolerance	Temperature Rise Current Typ.	Current Typ.	DC Resistance Typ.	DC Resistance Max.
					0.75	0.95
MDSA1870-R56M			56.0		0.85	
				50.0		1.35
					1.55	1.85
				35.0	1.85	2.25
					2.75	3.35
					3.75	4.55
				25.0		
						15.7



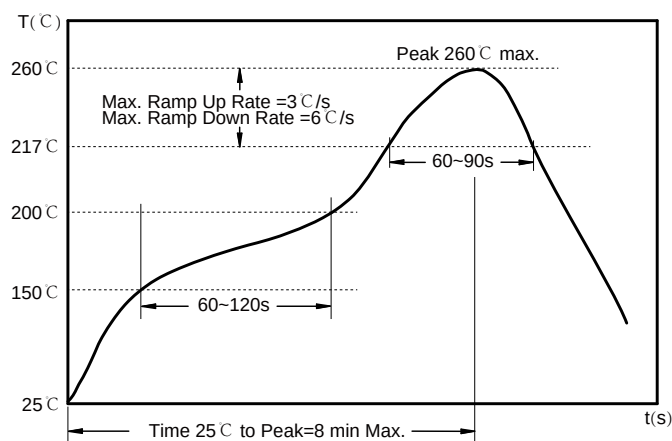
Saturation Current will cause L to drop approximately 36% at 80.0 °C. The actual value will vary with the actual value of the saturation current.

Typical Electrical Characteristics:





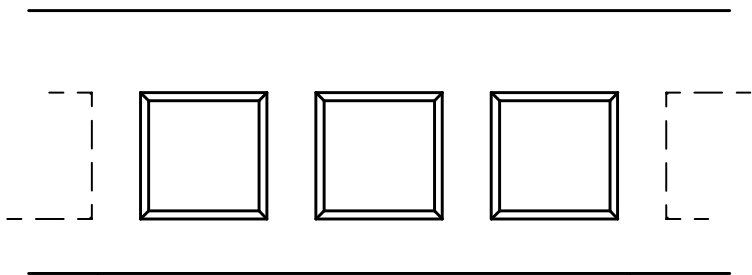
Soldering Reflow:



Preheat condition: 150 ~200℃ / 60~120 sec.
Allowed time above 217℃ : 60~90 sec.
Max temperature: 260℃ .
Max time at max temperature: 10 sec.
Allowed Reflow time: 2x max.

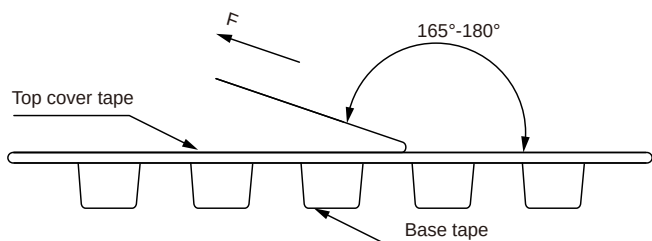
Packaging Information:

Tape Dimension :



A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
17.5±0.1	18.1±0.1	1.5±0.1	4.0±0.1	24.0±0.1	32.0±0.3	7.3±0.1	1.75±0.1	0.50±0.05

Peel force of top cover tape:



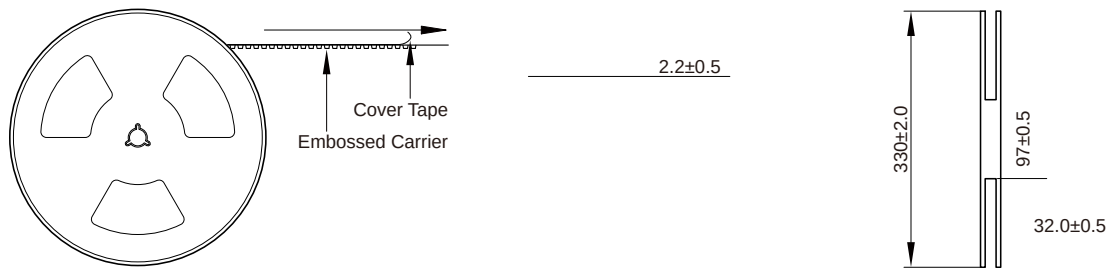
The peel force of top cover tape shall be between 0.1 to 1.3 N

Product Marking:

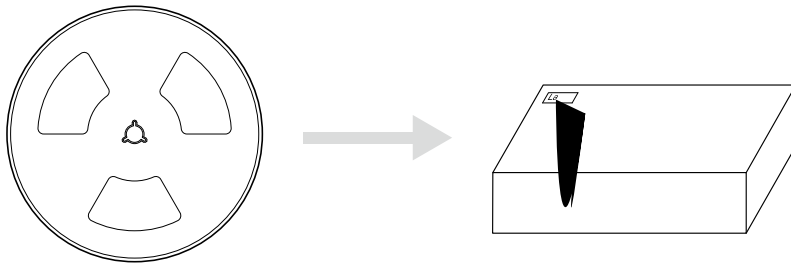
Marking	KH+Printing (Inductance+period)
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Reel Dimension: [mm]



Packaging Quantity:



200 Pcs/Reel

2 Reel /Inner box(400 Pcs)

2 Inner box/Carton box(800 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.