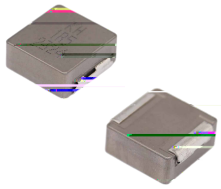
MDSA Series

SMD Low Profile High Current Molded Inductor

Size 1870



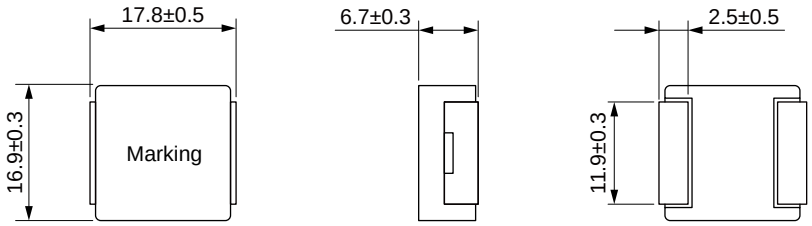
FEATURES

- S ł U t u
-
-
-
- Ultra low buzz noise, due to composite construc on.
-
- AEC-Q200 qualified
- Opera ng temperature: -55 to +155 °C(including self-temperature rise)
- Quan ty: 200PCS

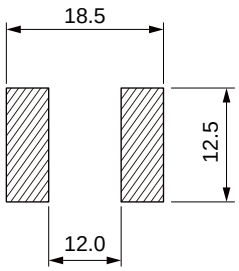
APPLICATION

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

Dimensions: [mm]



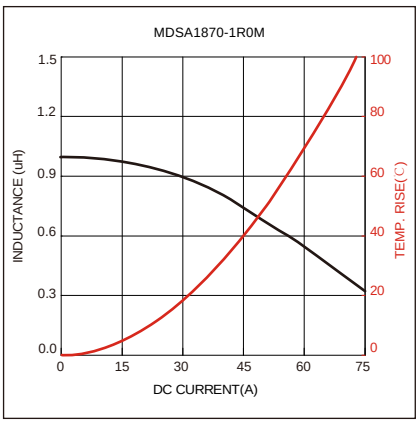
Land Pattern: [mm]

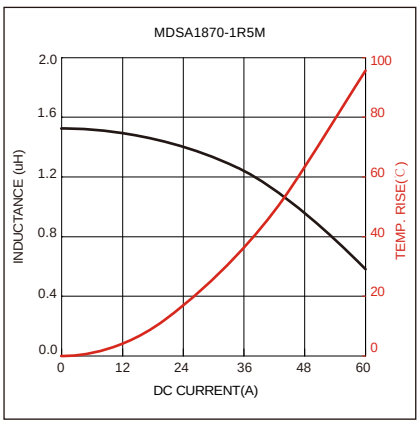


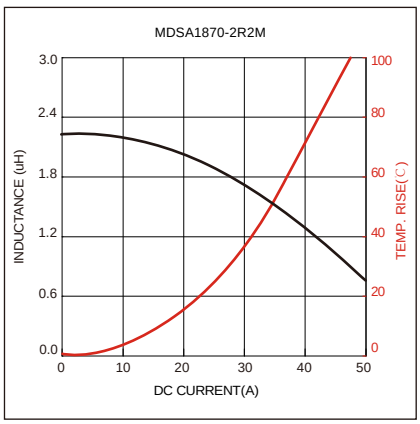
Electrical Properties:

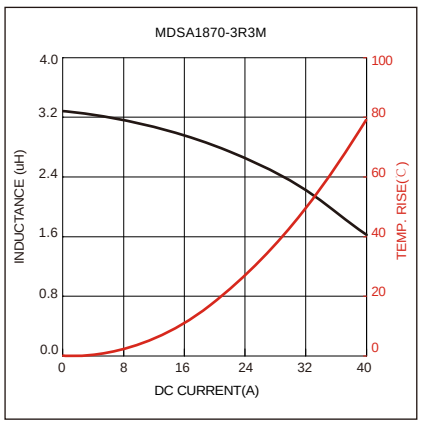
Part No		Tolerance	Temperature Rise Current Typ. (A)	Satura on Current Typ. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
					0.75	0.95
MDSA1870-R56M			56.0		0.85	
				50.0		1.35
MDSA и Л	ξ '	Satura on ξ '	0.56	1.50 15.0	1.55	1.85
		Current Max.		35.0	1.85	2.25
(A)		(A)			2.75	3.35
53.0					3.75	4.55
		67.5		25.0		
40.5						
		38.5				15.7
25.0		25.0				
13.5		13.5				

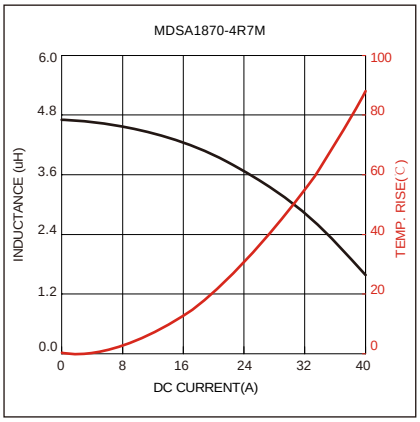
Typical Electrical Characteristics:

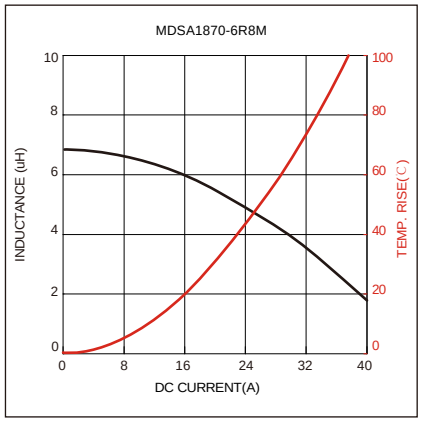


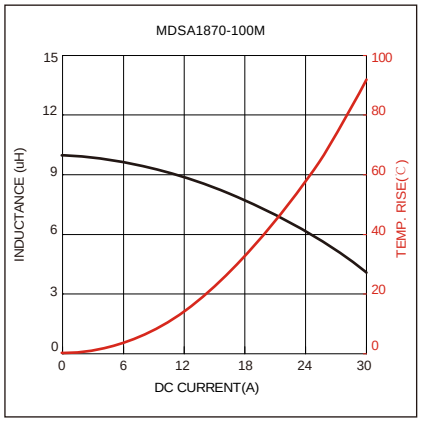


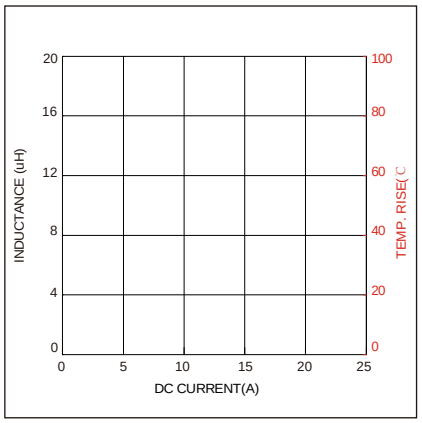




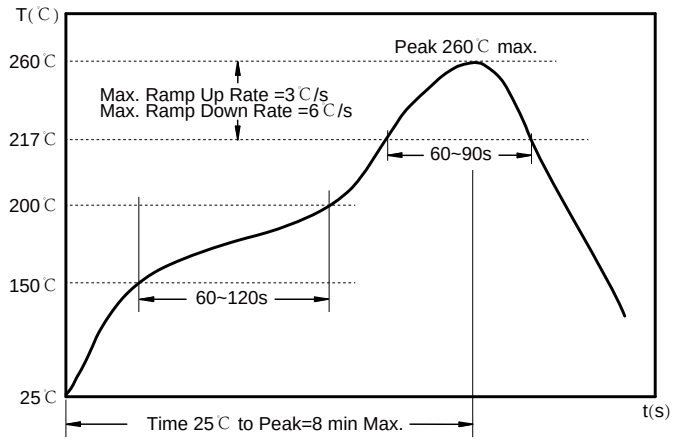







20
16
12
8
4
0
INDUCTANCE (uH)
100
80
60
40
20
0
TEMP. RISE(C
0
5
10
15
20
25
DC CURRENT(A)

Soldering Reflow:



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

Allowed time above 217℃: 60~90 sec.

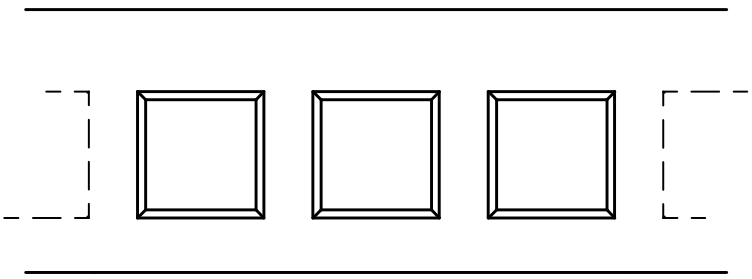
Max temperature: 260℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

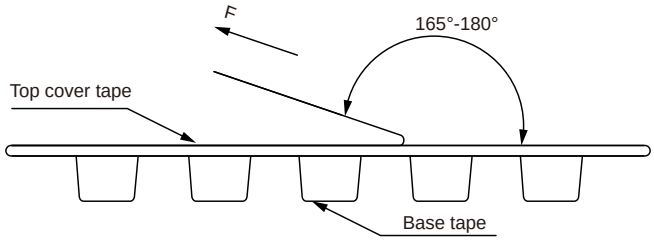
Packaging Information:

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:

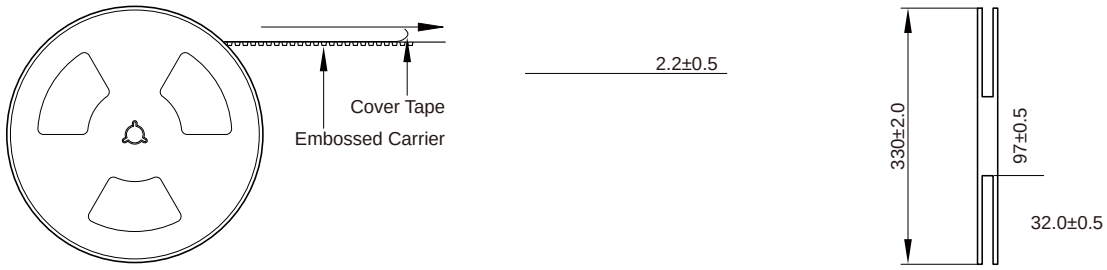


The peel force of top cover tape shall be between 0.1 to 1.3 N

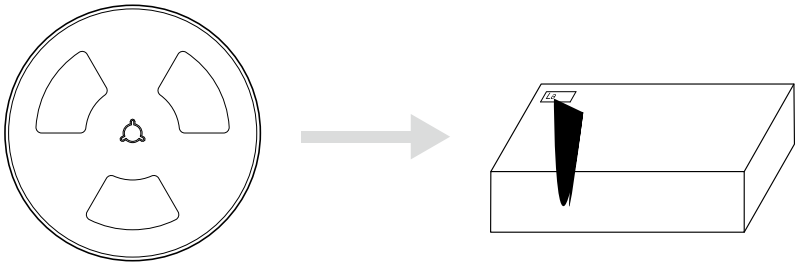
Product Marking:

Marking	KH+Printing (Inductance+period)

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.