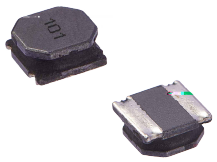
NRSA Series

SMD Power Inductors For Automotive

Size 4018W



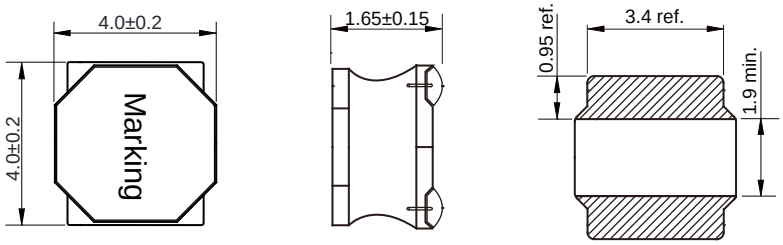
FEATURES

- Magne c shield type wound inductor for power circuits using a ferrite magne c material
- High magne c shield construc on and compa ble with high-density moun ng.
- Larger current and lower Rdc were achieved by op mizing the ferrite core figure.
- Opera ng temperature: –55 to +125°C(including self-tem perature rise)
- AEC-Q200 qualified
- Quan ty: 3000pcs

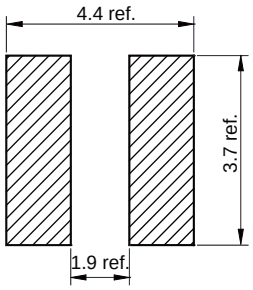
APPLICATION

- Smart cockpit

Dimensions: [mm]



Land Pattern: [mm]



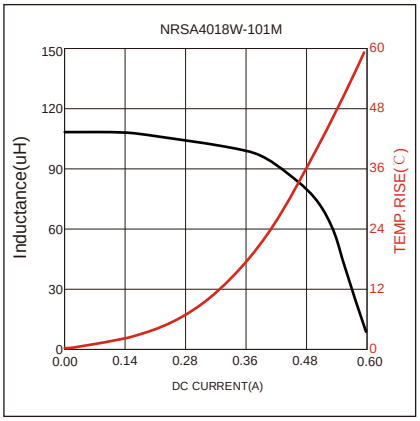
Electrical Properties:

	(μH)		(A)	Saturation (A)	(Ω)
NRSA4018W-101M	100	±20%	0.42	0.46	1.9

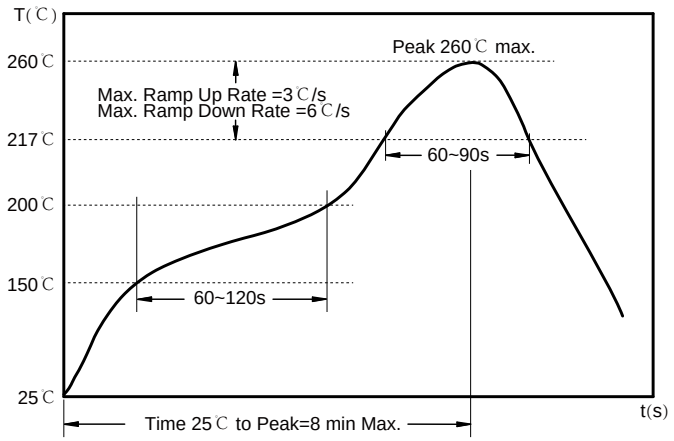
Saturation Current will cause L to drop approximately 30%

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

Typical Electrical Characteristics:



Soldering Reflow:



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

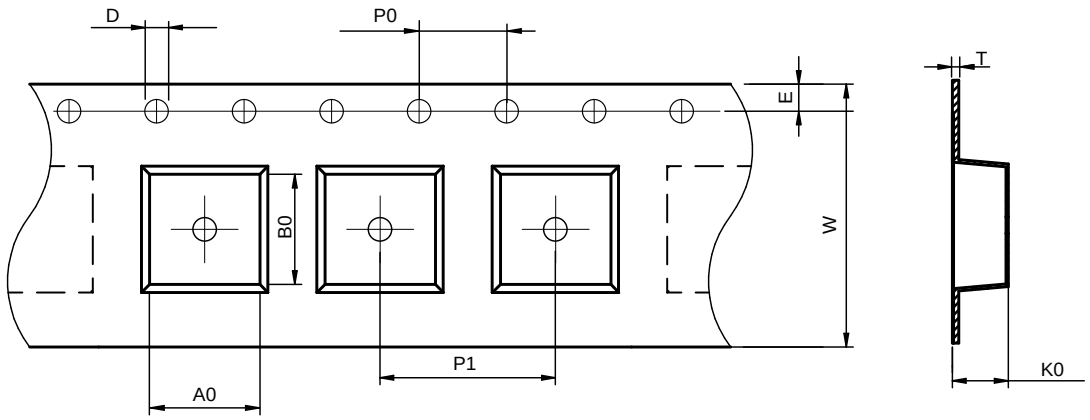
Allowed time above 217℃: 60~90 sec.

Max temperature: 260℃.

Allowed Reflow time: 2x max.

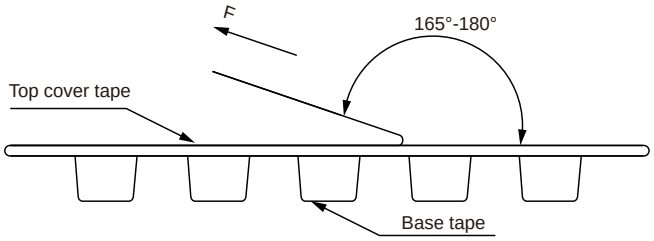
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
NRSA4018W	4.3±0.1	4.3±0.1	1.5±0.1	4.0±0.1	8.0±0.1	12.0±0.3	2.25±0.1	1.75±0.1	0.30±0.05

Peel force of top cover tape:

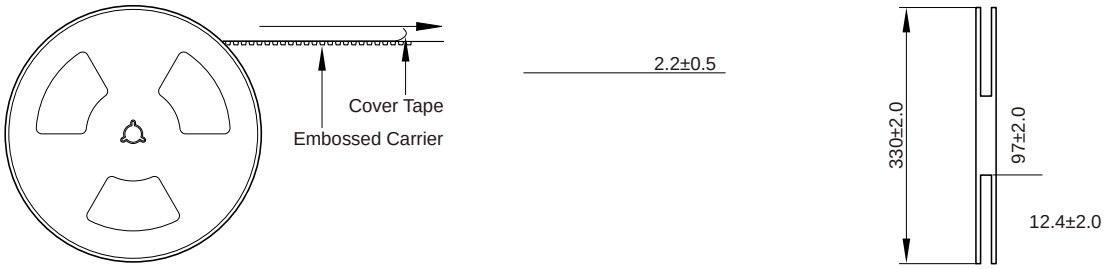


The peel force of top cover tape shall be between 0.3 to 1.17 N

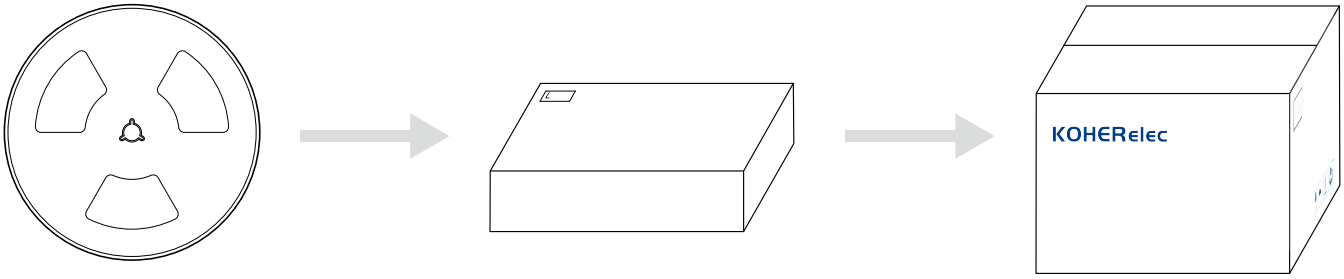
Product Marking:

Marking	101

Reel Dimension：[mm]



Packaging Quantity:



3000 Pcs/Reel

3 Reel /Inner box(9K Pcs)

3 Inner box/Carton box(27K 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.