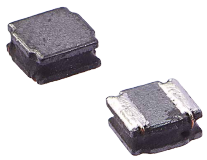
NRSA Series

SMD Power Inductors For Automotive

Size 3015



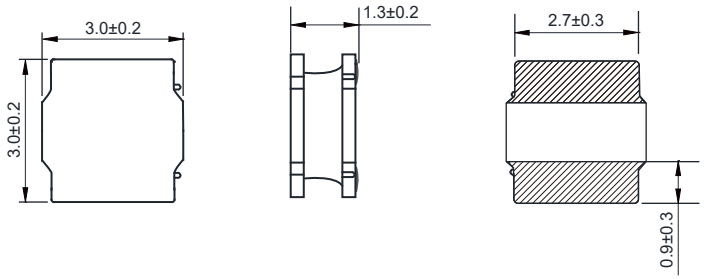
FEATURES

- Magnetic shield type wound inductor for power circuits using a ferrite magnetic material
- High magnetic shield construction and compatible with high-density mounting.
- Larger current and lower Rdc were achieved by optimizing the ferrite core figure.
- Operating temperature: –55 to +125°C(including self-temperature rise)
- AEC-Q200 qualified
- Quantity: 2000pcs

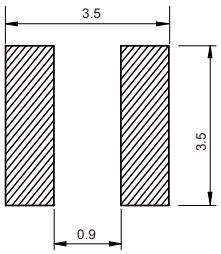
APPLICATION

- Car navigation, car stereo and car accessories only

Dimensions: [mm]



Land Pattern: [mm]



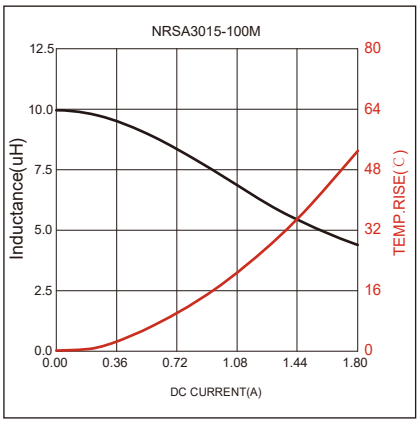
Electrical Properties:

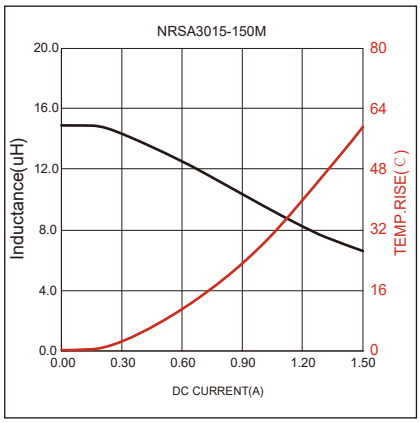
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Max. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
NRSA3015-100M	10.0	±20%	1.30	0.90	220	264
NRSA3015-150M	15.0	±20%	1.00	0.72	310	372
NRSA3015-180M	18.0	±20%	0.92	0.65	380	456
NRSA3015-220M	22.0	±20%	0.85	0.59	450	540
NRSA3015-330M	33.0	±20%	0.75	0.51	780	940
NRSA3015-470M	47.0	±20%	0.60	0.41	1200	1440
NRSA3015-101M	100	±20%	0.35	0.30	3400	4080

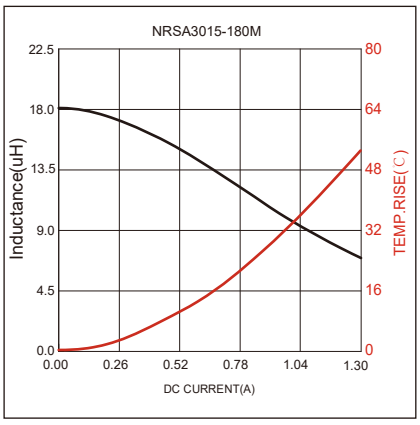
Saturation Current will cause L to drop approximately 30%

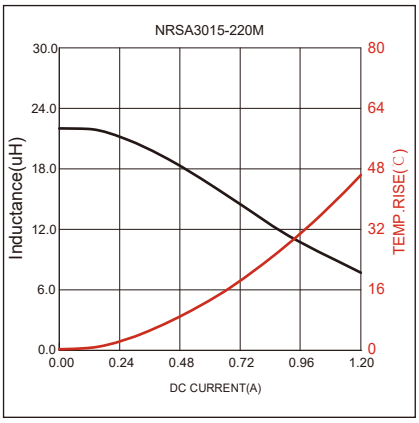
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

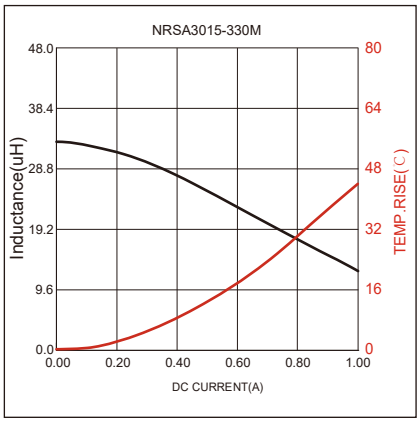
Typical Electrical Characteristics:

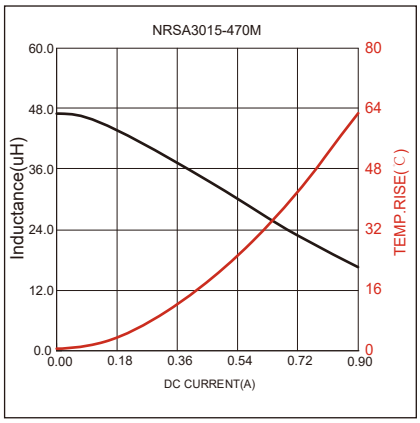


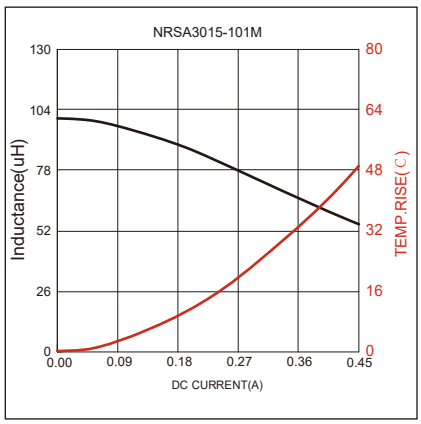




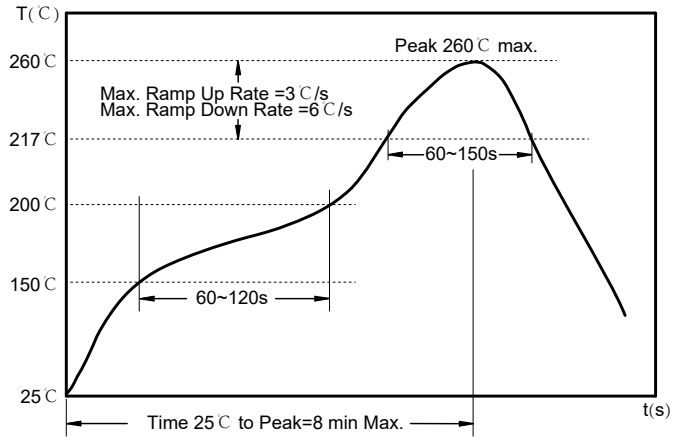








Soldering Reflow:



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

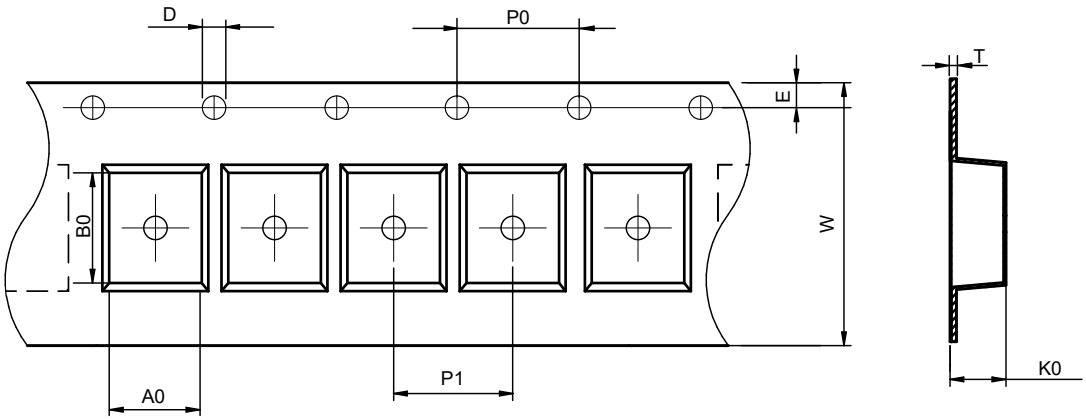
Allowed time above 217℃: 60~150 sec.

Max temperature: 260℃.

Allowed Reflow time: 3x max.

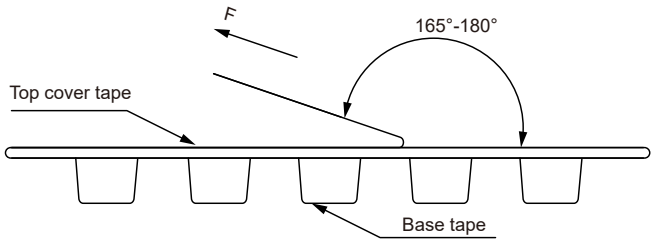
Packaging Information:

Tape Dimension:



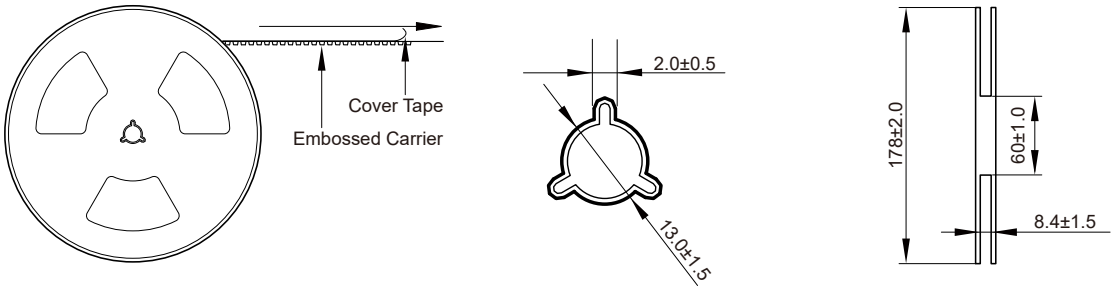
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
NRSA3015	3.4±0.1	3.4±0.1	1.5±0.1	4.0±0.1	4.0±0.1	8.0±0.3	1.7±0.1	1.75±0.1	0.23±0.1

Peel force of top cover tape:

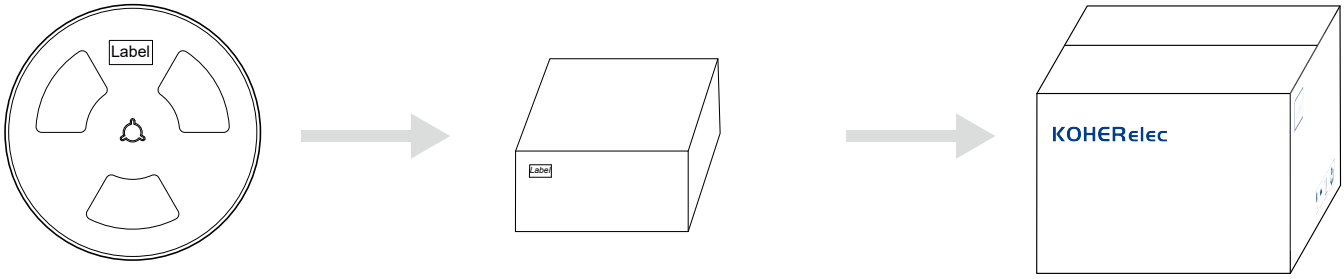


The peel force of top cover tape shall be between 0.1 to 0.98 N

Reel Dimension： [mm]



Packaging Quantity:



2000 Pcs/Reel

5 Reel /Inner box(10K Pcs)

8 Inner box/Carton box(80K 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.