NRSA Series

SMD Power Inductors For Automotive
Size 2520B

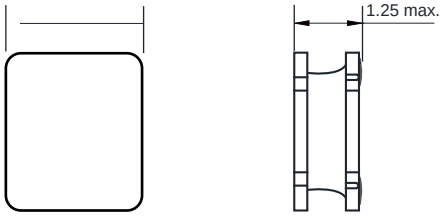
FEATURES

- 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-temperature rise)
- AEC-Q200 qualified
- Quan ty: 2000pcs

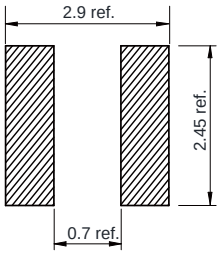
APPLICATION

- Car naviga on, car stereo and car accessories only

Dimensions: [mm]



Land Pattern: [mm]

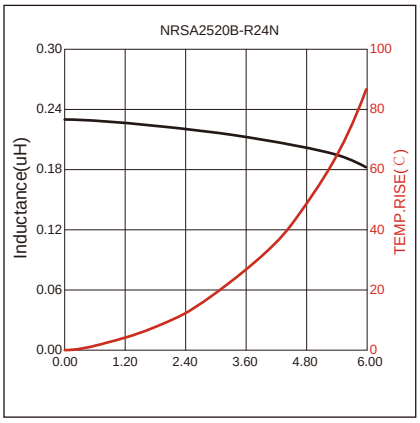


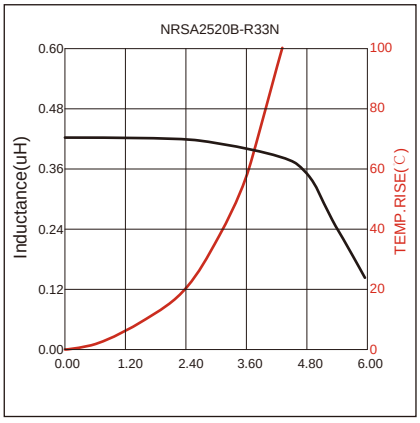
Electrical Properties:

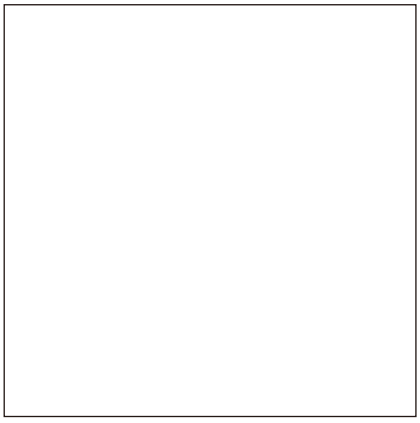
		±30%	3.50	4.05	28
		±30%	3.00	4.00	40
		±30%	2.90	3.60	40
		±30%	2.80	3.30	40
		±30%	2.60	3.28	45
		±20%	2.40	2.45	60
		±20%	1.90	2.05	84
		±20%	1.80	1.90	110
		±20%	1.40	1.50	155
		±20%	1.20	1.35	228
		±20%	0.90	1.00	325
		±20%	0.75	0.79	480
		±20%	0.55	0.65	625
		±20%	0.50	0.55	1000
		±20%	0.45	0.50	1020
		±20%	0.37	0.38	1400
		±20%	0.29	0.30	2000

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:







2.0

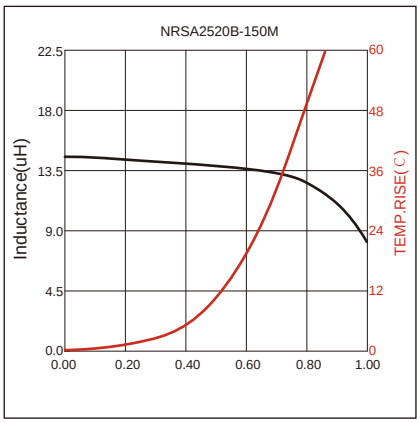
1.6

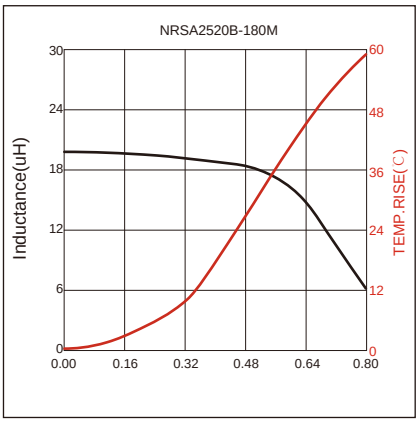
1.2

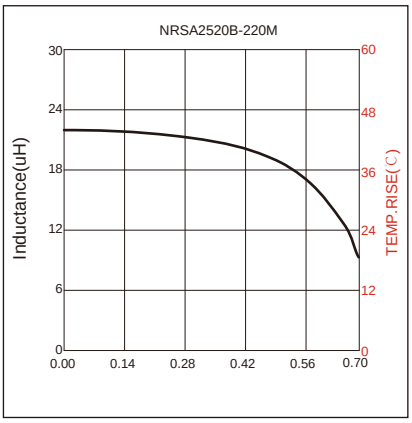
0.8

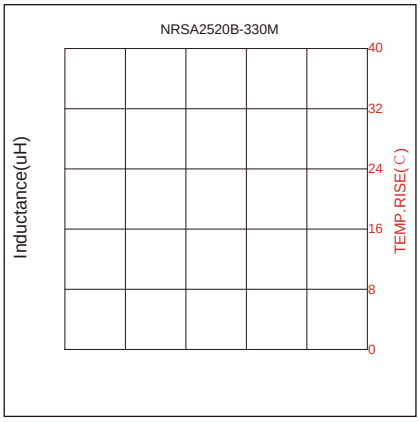
0.4

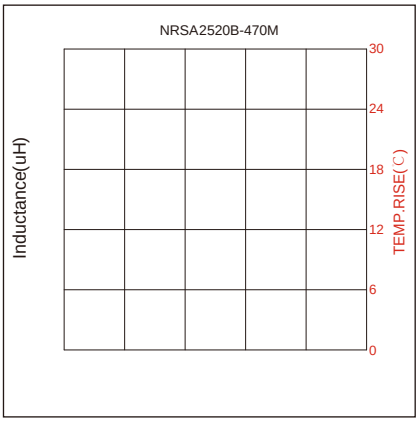
0.0


NRSA2520B-150M
Inductance(uH)
TEMP.RISE(℃)
22.5
18.0
13.5
9.0
4.5
0.0
60
48
36
24
12
0
0.00
0.20
0.40
0.60
0.80
1.00


NRSA2520B-180M
Inductance(uH)
TEMP.RISE(℃)
30
24
18
12
6
0
60
48
36
24
12
0
0.00
0.16
0.32
0.48
0.64
0.80


NRSA2520B-220M
Inductance(uH)
TEMP.RISE(℃)
30
24
18
12
6
0
60
48
36
24
12
0
0.00
0.14
0.28
0.42
0.56
0.70


NRSA2520B-330M
Inductance(uH)
TEMP.RISE(℃)
40
32
24
16
8
0


NRSA2520B-470M
Inductance(uH)
TEMP.RISE(℃)
30
24
18
12
6
0

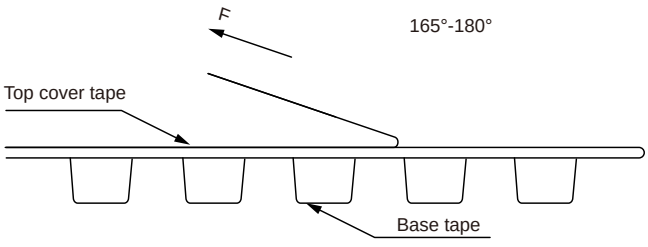
Soldering Reflow:

Packaging Information:

Tape Dimension:

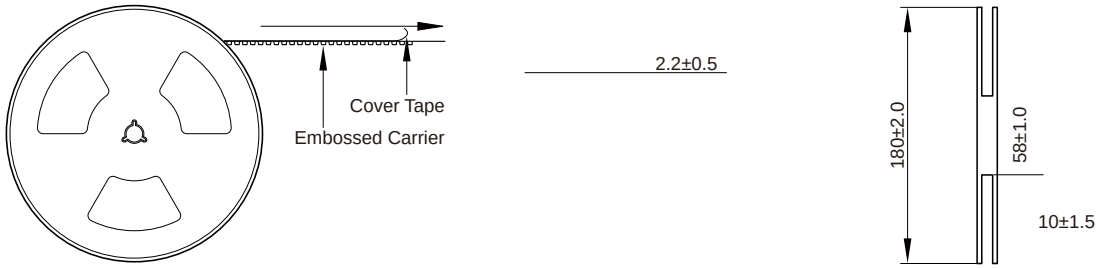
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
NRSA2520B	2.4±0.1	3.0±0.1	1.5±0.1	4.0±0.1	4.0±0.1	8.0±0.1	1.4±0.1	1.75±0.1	0.20±0.05

Peel force of top cover tape:

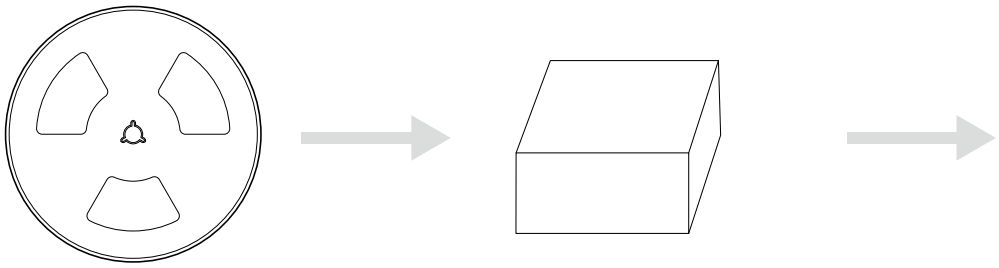


The peel force of top cover tape shall be between 0.2 to 0.58 N

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.