



## NRSA Series

### SMD Power Inductors For Automotive Size 2520B

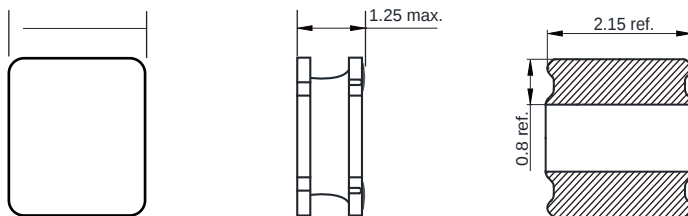
#### FEATURES

- 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

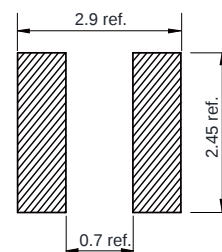
#### APPLICATION

- Car navigation, car stereo and car accessories only

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

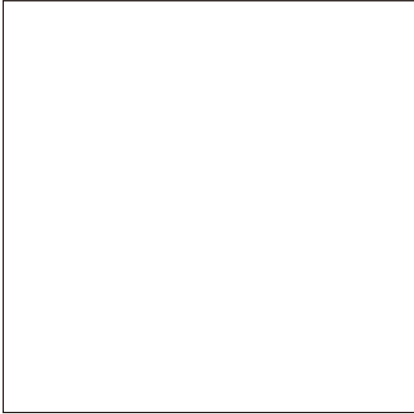
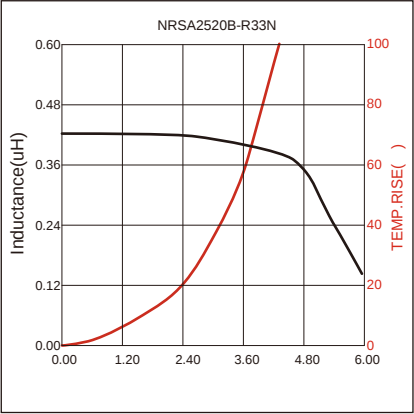
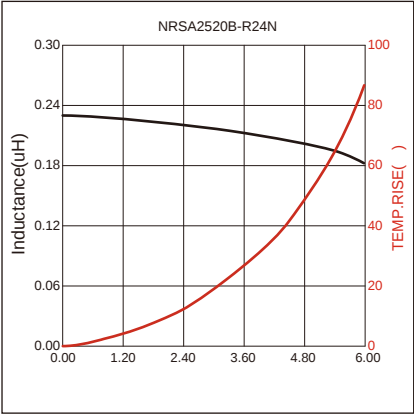
|  |  | ±30% | 3.50 | 4.05 28   |
|--|--|------|------|-----------|
|  |  | ±30% | 3.00 | 4.00 40   |
|  |  | ±30% | 2.90 | 3.60 40   |
|  |  | ±30% | 2.80 | 3.30 40   |
|  |  | ±30% | 2.60 | 3.28 45   |
|  |  | ±20% | 2.40 | 2.45 60   |
|  |  | ±20% | 1.90 | 2.05 84   |
|  |  | ±20% | 1.80 | 1.90 110  |
|  |  | ±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%

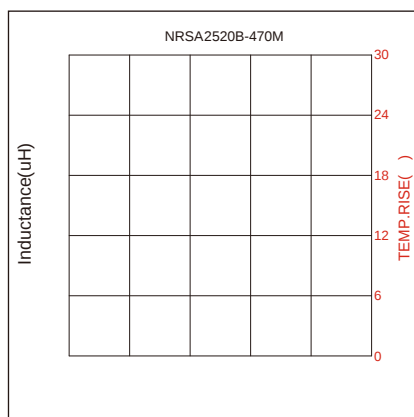
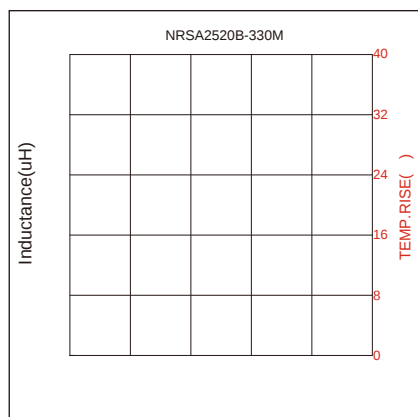
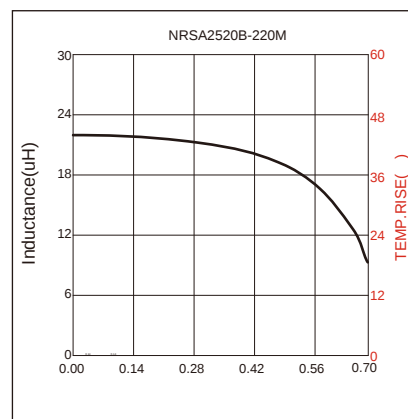
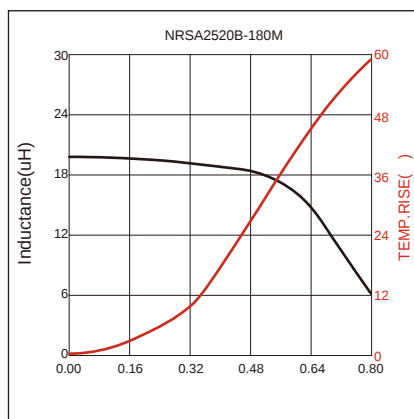
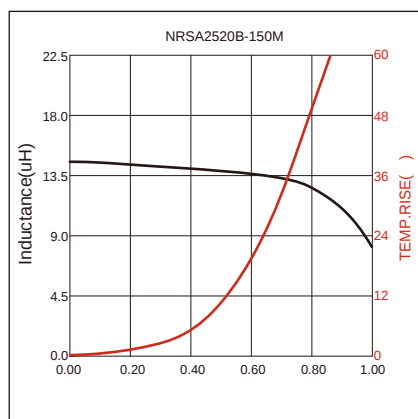
Temperature Rise Current: The actual value of DC current when the temperature rise is T=40°C



Typical Electrical Characteristics:



2.0  
1.6  
1.2  
0.8  
0.4  
0.0



## Soldering Reflow:



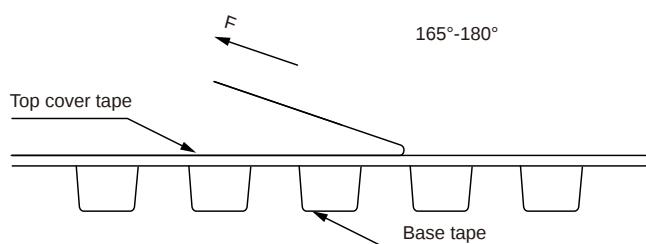
## Packaging Information:

Tape Dimension :



| Series    | A0<br>(mm) | B0<br>(mm) | D<br>(mm) | P0<br>(mm) | P1<br>(mm) | W<br>(mm) | K0<br>(mm) | E<br>(mm) | T<br>(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 |

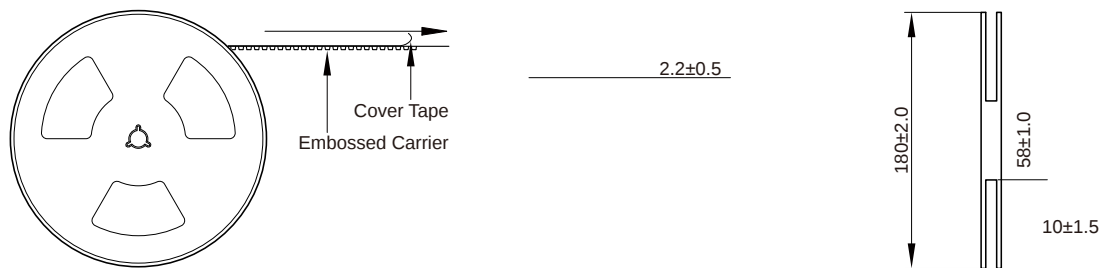
Peel force of top cover tape:



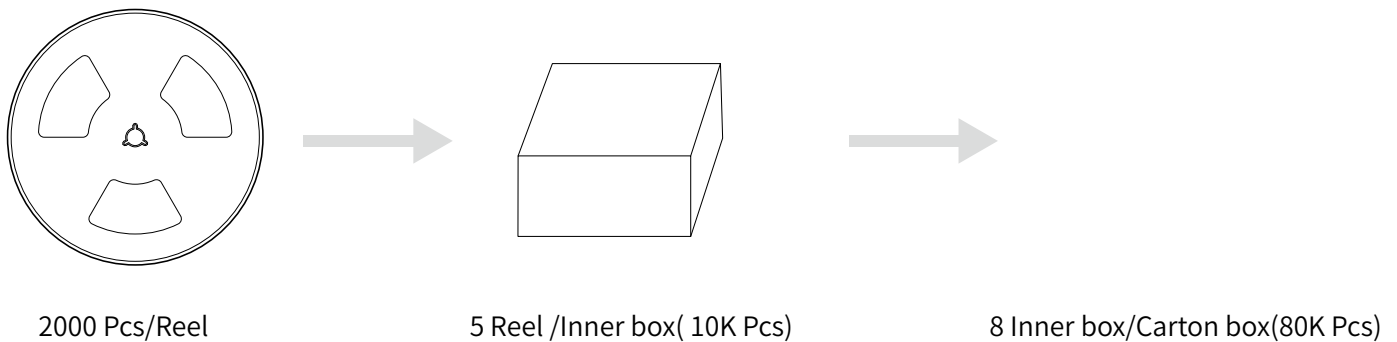
The peel force of top cover tape shall be between 0.2 to 0.58 N



## Reel Dimension : [mm]



## Packaging Quantity:



## 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.