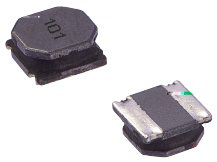
# NRSA Series

SMD Power Inductors For Automotive

Size 4018W



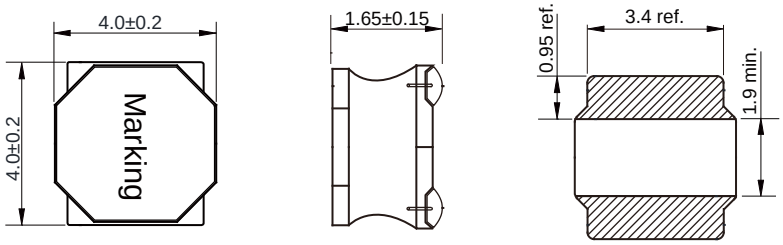
**FEATURES**

- 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

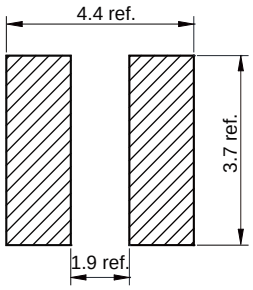
**APPLICATION**

- Smart cockpit

## Dimensions: [mm]




## Land Pattern: [mm]



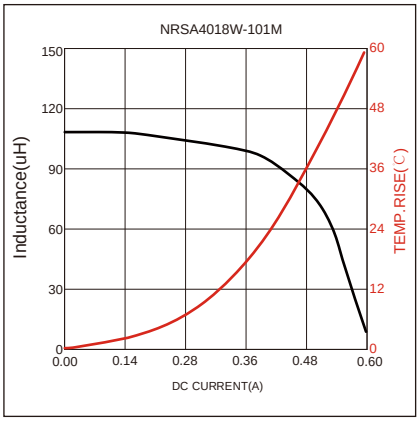

## Electrical Properties:

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

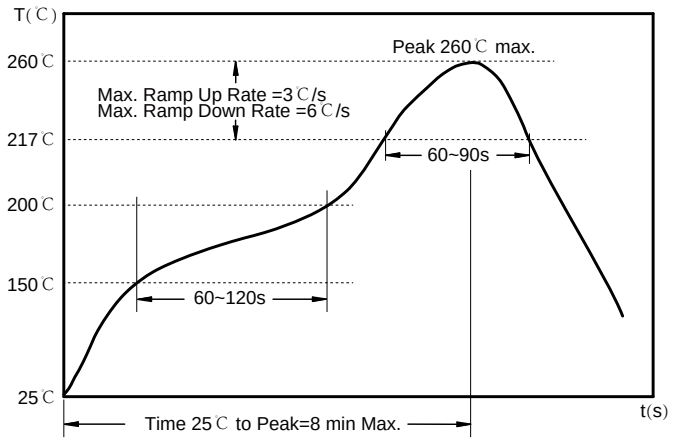
Saturation Current will cause L to drop approximately 30%

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.

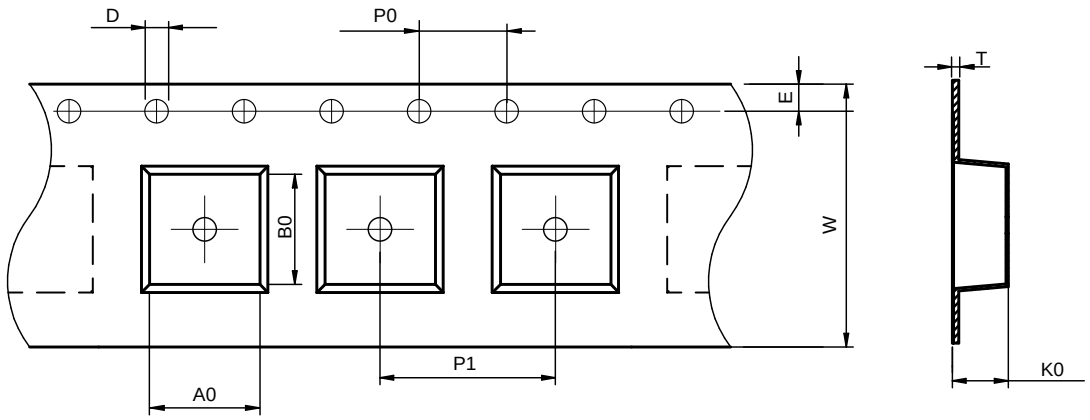
Allowed time above 217℃: 60~90 sec.

Max temperature: 260℃.

Allowed Reflow time: 2x max.

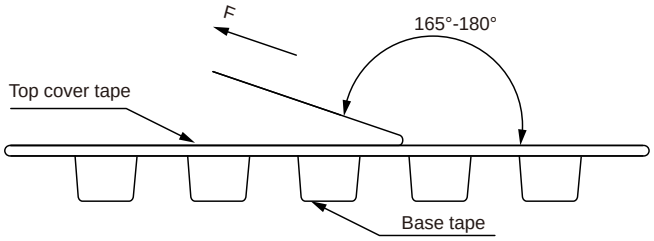
## Packaging Information:

### 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:

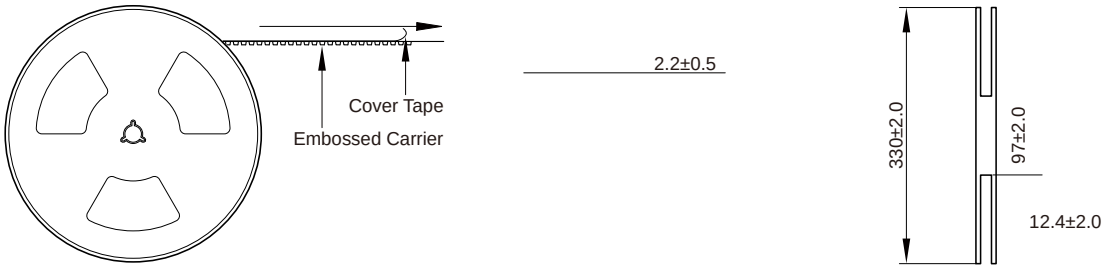



The peel force of top cover tape shall be between 0.3 to 1.17 N

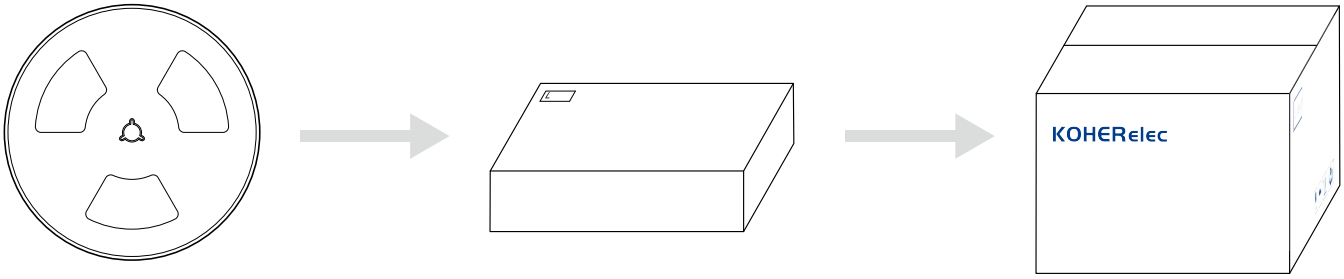
### Product Marking:

| | |
|---|---|
| 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.