

## Inductors

## NRS3015T1R5NNGH



## ■ Features

- Item Summary  
1.5uH±30%, 1.8A, 3.0x3.0x1.5mm
- Lifecycle Stage  
New PN available
- Standard packaging quantity (minimum)  
Taping Embossed 2000pcs

## ■ Products characteristics table

|   |   |
|---|---|
| Inductance  | 1.5 uH ± 30 %                                     |
| Case Size (mm)                                    | 3.0x3.0   |
| Rated Current (max)                               | 1.8 A   |
| Saturation Current (max)                          | 1.8 A (ΔL=30%)                                    |
| Saturation Current (typ)                          | 2.1 A (ΔL=30%)                                    |
| Temperature Rise Current (max)                    | 1.82 A (ΔT=40°C)                                  |
| Temperature Rise Current (typ)                    | 2.1 A (ΔT=40°C)                                   |
| DC Resistance (max)                               | 45.6 mΩ   |
| DC Resistance (typ)                               | 38 mΩ   |
| LQ Measuring Frequency                            | 100 kHz   |
| Self Resonant Frequency (min)                     | 87 MHz  |
| Operating Temp. Range                             | -25 to +120 °C<br>(Including-self-generated heat) |
| Temperature characteristic<br>(Inductance change) | ± 20 %  |
| RoHS Compliance (10 subst.)                       | Yes   |
| REACH Compliance (223 subst.)                     | Yes   |
| Halogen Free                                      | Yes   |
| Soldering   | Reflow  |

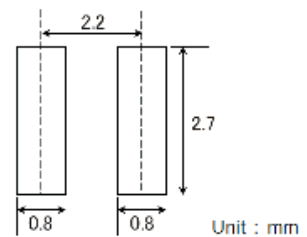
## ■ External Dimensions

|             |             |
|-------------|-------------|
| Dimension L | 3.0 ±0.1 mm |
| Dimension W | 3.0 ±0.1 mm |
| Dimension H | Max 1.5 mm  |
| Dimension e | 0.9 ±0.2 mm |
| Dimension f | 1.9 ±0.2 mm |

## ■ Recommended Land Patterns

【推奨のランドパターン】  
 二層基板の場合  
 ・銅箔の厚さを0.03mm以上0.05mm以下に設定してください。  
 ・銅箔の表面粗さを0.1μm以下に設定してください。

【Printed Circuit Board Pattern】  
 Surface Mounting  
 ・If a printed circuit board is used, the board thickness should be 0.3mm or more.  
 ・Apply the soldering process to these products on the recommended land pattern.



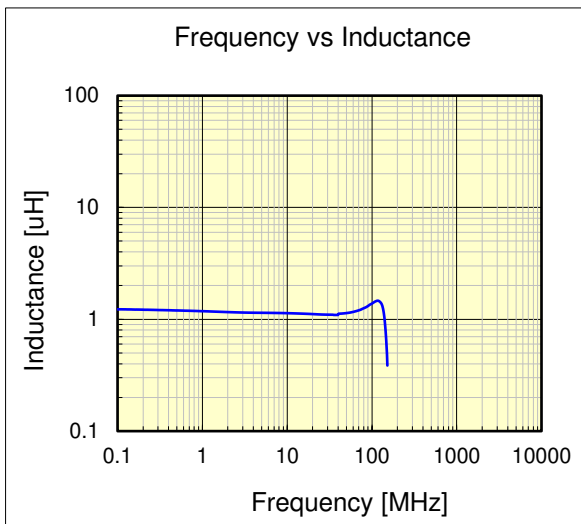
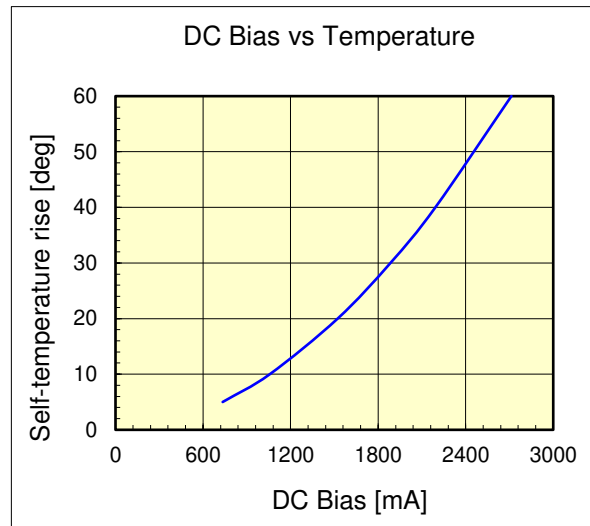
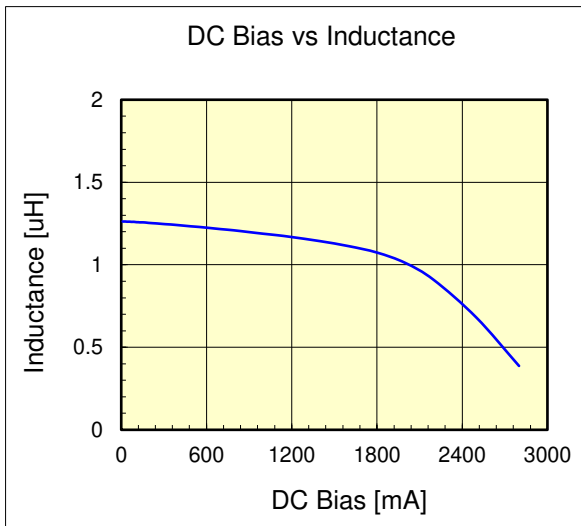
SMD Power Inductors (NR series S type)

NRS3015T1R5NNGH



| Dimension | unit : mm   | unit : inch       |
|-----------|-------------|-------------------|
| Length :  | 3.0 +/- 0.1 | (0.118 +/- 0.004) |
| Width :   | 3.0 +/- 0.1 | (0.118 +/- 0.004) |
| Height :  | 1.5 max.    | (0.059 max.)      |

Inductance : 1.5 uH (test freq at 0.1MHz)  
 DC Resistance : 0.038 / 0.0456 ohm (typ / max)  
 Saturation Current : 1,800 mA (max)  
 Temp. rise Current : 1,820 mA (max)  
 Saturation current typical : 30% reduction from initial L value.  
 Temp rise Current typical : Temperature will rise by 40 deg C



The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the data at any time without notice. Before making final selection, please check product specification.

Please read this notice before using the TAIYO YUDEN products.



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