

## Inductors

## NRS6010T4R7MMGF



## ■ Features

- Item Summary  
4.7uH±20%, 1.3A, 6.0x6.0x1.0mm
- Lifecycle Stage  
New PN available
- Standard packaging quantity (minimum)  
Taping Embossed 1000pcs

## ■ Products characteristics table

|   |   |
|---|---|
| Inductance  | 4.7 uH ± 20 %                                     |
| Case Size (mm)                                    | 6.0x6.0   |
| Rated Current (max)                               | 1.3 A   |
| Saturation Current (max)                          | 1.3 A (ΔL=30%)                                    |
| Saturation Current (typ)                          | 1.47 A (ΔL=30%)                                   |
| Temperature Rise Current (max)                    | 1.4 A (ΔT=40°C)                                   |
| Temperature Rise Current (typ)                    | 1.6 A (ΔT=40°C)                                   |
| DC Resistance (max)                               | 0.198 Ω   |
| DC Resistance (typ)                               | 0.165 Ω   |
| LQ Measuring Frequency                            | 100 kHz   |
| Self Resonant Frequency (min)                     | 36 MHz  |
| Operating Temp. Range                             | -25 to +125 °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  | 6.0 ±0.2 mm  |
| Dimension W  | 6.0 ±0.2 mm  |
| Dimension H  | Max 1.0 mm   |
| Dimension e  | 1.35 ±0.2 mm |
| Dimension f  | 4.0 ±0.2 mm  |
| Dimension ΔI | Typ 2.3 mm   |

## ■ Recommended Land Patterns

【推奨のランドパターン】  
 両面テープ  
 ・両面テープの厚さは0.1mm以下にしてください。  
 ・両面テープの接着剤は、熱安定性のある接着剤を使用してください。

【Recommended Land Pattern】  
 Surface Mounting  
 ・Flux is not to be used in the reflow process.  
 ・Apply the soldering process to these products in reflow soldering only.



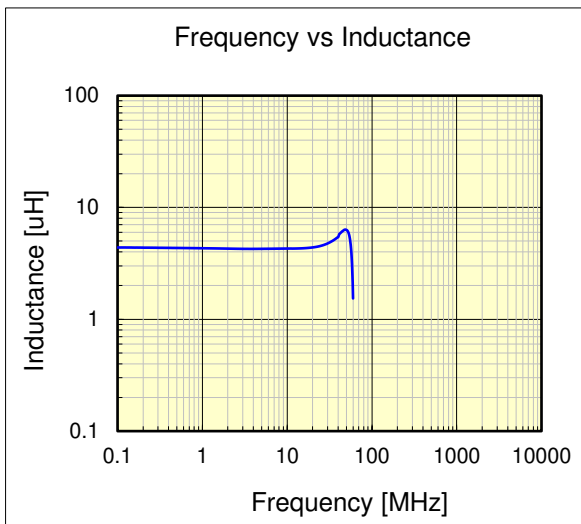
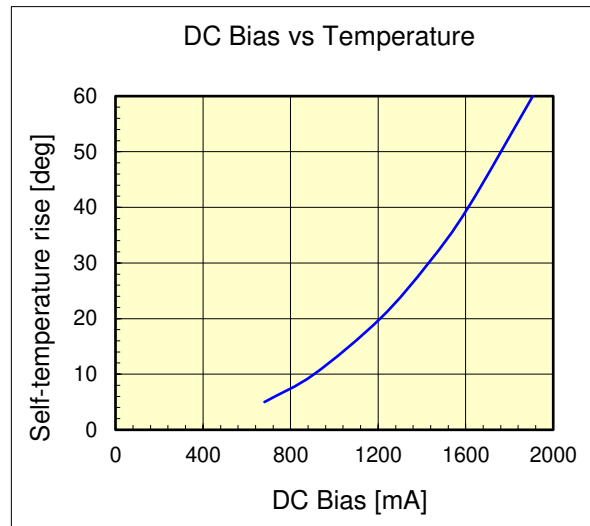
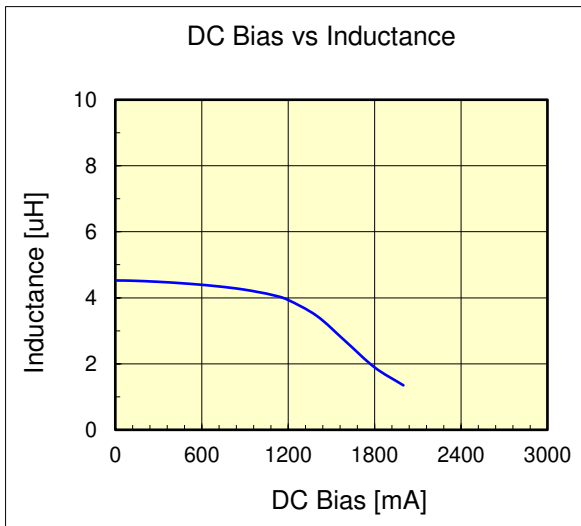
SMD Power Inductors (NR series S type)

NRS6010T4R7MMGF



| Dimension | unit : mm   | unit : inch         |
|-----------|-------------|---------------------|
| Length :  | 6.0 +/- 0.2 | ( 0.236 +/- 0.008 ) |
| Width :   | 6.0 +/- 0.2 | ( 0.236 +/- 0.008 ) |
| Height :  | 1.0 max.    | ( 0.039 max. )      |

|  |               |                            |
|--|---------------|----------------------------|
| Inductance :   | 4.7           | uH ( test freq at 0.1MHz ) |
| DC Resistance :  | 0.165 / 0.198 | ohm ( typ / max )          |
| Saturation Current :   | 1,300         | mA ( max )                 |
| Temp. rise Current :   | 1,400         | 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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