

Inductors

NRS6010T6R8MMGF



■ Features

- Item Summary
6.8uH±20%, 1.2A, 6.0x6.0x1.0mm
- Lifecycle Stage
New PN available
- Standard packaging quantity (minimum)
Taping Embossed 1000pcs

■ Products characteristics table

| | |
|---|---|
| Inductance | 6.8 uH ± 20 % |
| Case Size (mm) | 6.0x6.0 |
| Rated Current (max) | 1.2 A |
| Saturation Current (max) | 1.2 A (ΔL=30%) |
| Saturation Current (typ) | 1.3 A (ΔL=30%) |
| Temperature Rise Current (max) | 1.2 A (ΔT=40°C) |
| Temperature Rise Current (typ) | 1.32 A (ΔT=40°C) |
| DC Resistance (max) | 0.264 Ω |
| DC Resistance (typ) | 0.22 Ω |
| LQ Measuring Frequency | 100 kHz |
| Self Resonant Frequency (min) | 30 MHz |
| Operating Temp. Range | -25 to +125 °C (Including-self-generated heat) |
| Temperature characteristic (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
 ・両面テープは、必ずしも必要ではありません。
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【Recommended Land Pattern】
 Surface Mounting
 ・If a reflow soldering method is used, the lead is not bent.
 ・Apply the soldering process to these products in reflow soldering only.



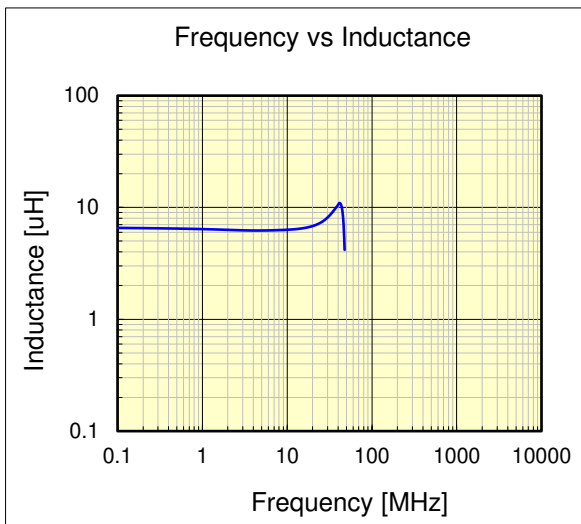
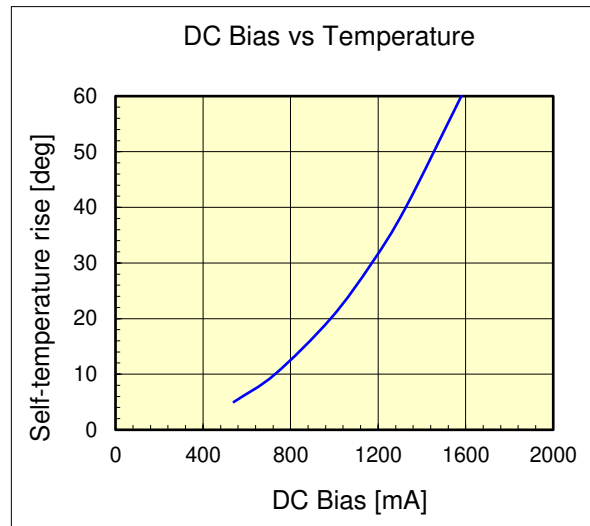
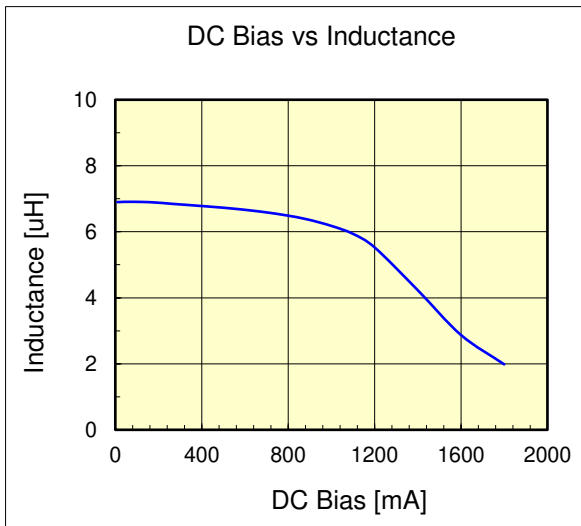
SMD Power Inductors (NR series S type)

NRS6010T6R8MMGF



| 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 : | 6.8 | uH (test freq at 0.1MHz) |
| DC Resistance : | 0.22 / 0.264 | ohm (typ / max) |
| Saturation Current : | 1,200 | mA (max) |
| Temp. rise Current : | 1,200 | 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.



REMINDERS

- Please conduct validation and verification of our products in actual condition of mounting and operating environment before using our products.
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Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).
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