

Inductors

NRS4018T6R8MDGJ



■ Features

- Item Summary
6.8uH±20%, 1.45A, 4.0x4.0x1.8mm
- Lifecycle Stage
New PN available
- Standard packaging quantity (minimum)
Taping Embossed 3500pcs

■ Products characteristics table

Inductance	6.8 uH ± 20 %
Case Size (mm)	4.0x4.0
Rated Current (max)	1.45 A
Saturation Current (max)	1.6 A (ΔL=30%)
Saturation Current (typ)	1.82 A (ΔL=30%)
Temperature Rise Current (max)	1.45 A (ΔT=40°C)
Temperature Rise Current (typ)	1.69 A (ΔT=40°C)
DC Resistance (max)	117.6 mΩ
DC Resistance (typ)	98 mΩ
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

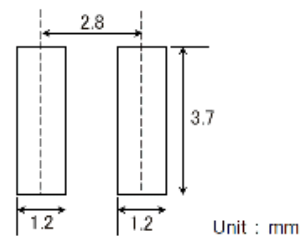
■ External Dimensions

Dimension L	4.0 ±0.2 mm
Dimension W	4.0 ±0.2 mm
Dimension H	Max 1.8 mm
Dimension e	1.1 ±0.2 mm
Dimension f	2.5 ±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。

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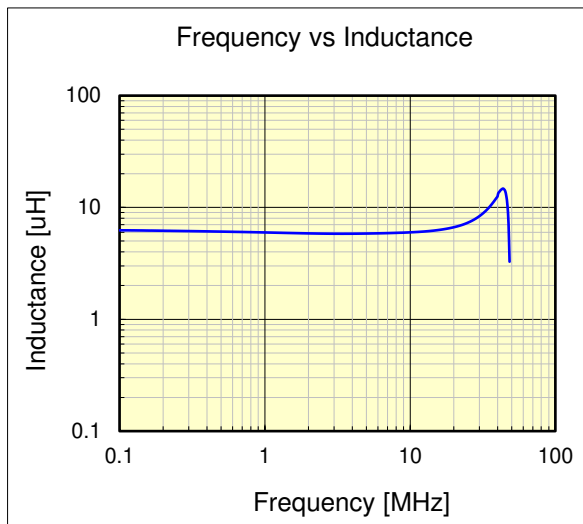
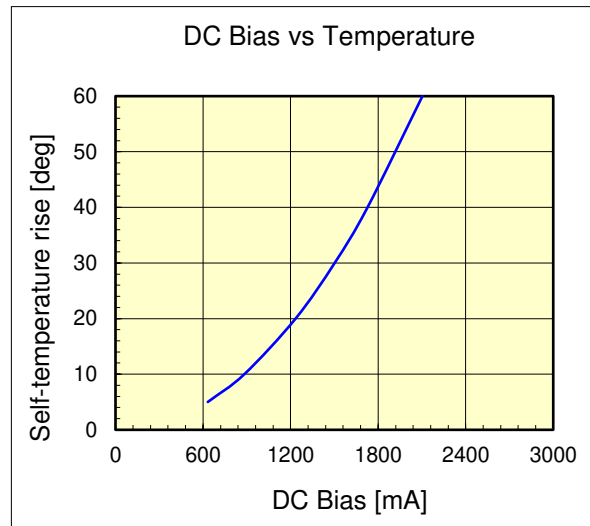
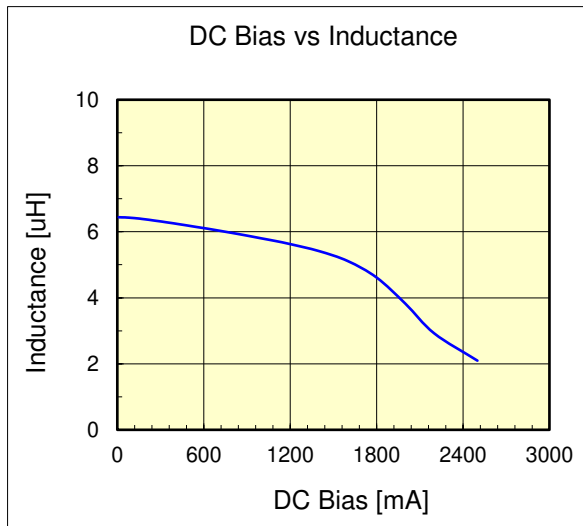
SMD Power Inductors (NR series S type)

NRS4018T6R8MDGJ



Dimension	unit : mm	unit : inch
Length :	4.0 +/- 0.2	(0.157 +/- 0.008)
Width :	4.0 +/- 0.2	(0.157 +/- 0.008)
Height :	1.8 max.	(0.071 max.)

Inductance :	6.8	uH (test freq at 0.1MHz)
DC Resistance :	0.098 / 0.1176	ohm (typ / max)
Saturation Current :	1,600	mA (max)
Temp. rise Current :	1,450	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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