

SMD Power Inductors (NS series)

NS10165T6R8NNA



■ Features

- Item Summary
6.8uH±30%, 5.22A, 10.1x10.1x6.5mm
- Lifecycle Stage
Mass Production
- Standard packaging quantity (minimum)
Taping Embossed 2000pcs(500pcs*4reel)

■ Products characteristics table

Inductance	6.8 uH ± 30 %
Case Size (mm)	10.1x10.1
Rated Current (max)	5.22 A
Saturation Current (max)	6 A
Temperature Rise Current (max)	5.22 A
DC Resistance (max)	16.8 mΩ
DC Resistance (typ)	14 mΩ
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	20.7 MHz
Operating Temp. Range	-40 to +125 °C (Including-self-generated heat)
Temperature characteristic (Inductance change)	± 15 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

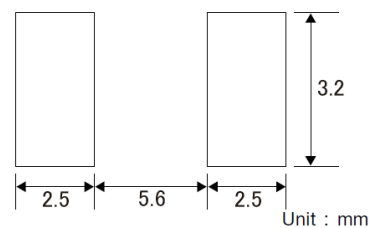
■ External Dimensions

Dimension L	10.1 ±0.3 mm
Dimension W	10.1 ±0.3 mm
Dimension H	6.5 ±0.35 mm
Dimension a	2.8 ±0.1 mm
Dimension b	2.0 ±0.15 mm

■ Recommended Land Patterns

【推奨ランドパターン】
実装上の注意
・実装状態を確認の上ご使用くださいますようお願いいたします。
・本製品のはんだ付けはリフローはんだ工法に限ります。

【Recommended Land Patterns】
Surface Mounting
・Mounting and soldering conditions should be checked beforehand.
・Applicable soldering process to these products is reflow soldering only.



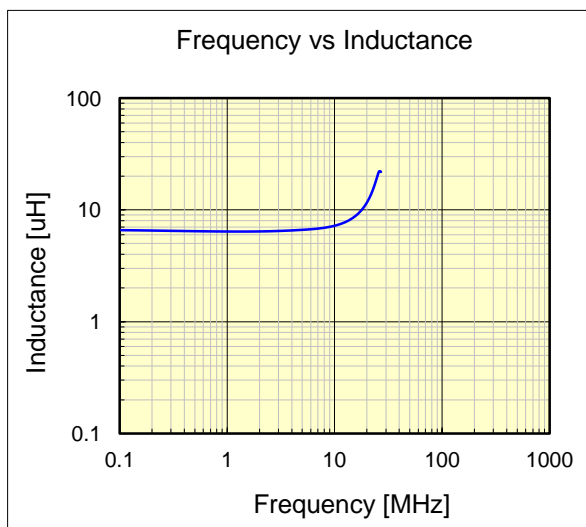
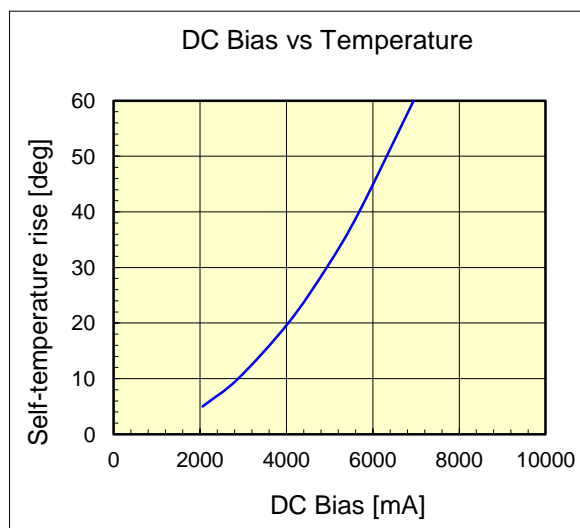
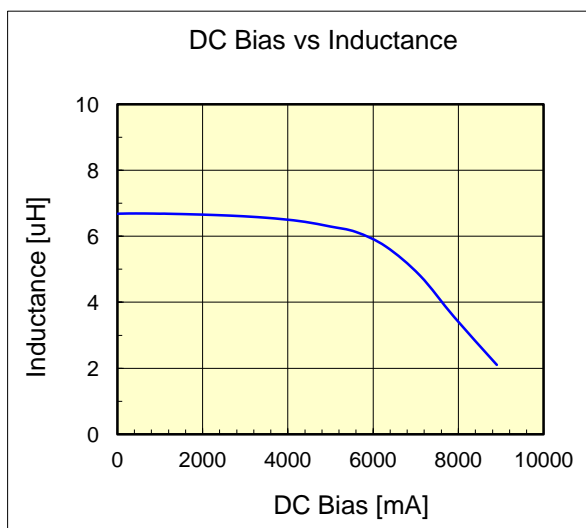
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Dimension	unit : mm	unit : inch
Length :	10.1 +/- 0.3	(0.398 +/- 0.012)
Width :	10.1 +/- 0.3	(0.398 +/- 0.012)
Height :	6.5 +/- 0.35	(0.256 +/- 0.014)

Inductance :	6.8	μ H (test freq at 0.1MHz)
DC Resistance :	0.014 / 0.0168	ohm (typ / max)
Saturation Current :	6.00	A (max)
Temp. rise Current :	5.22	A (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.