

Inductors

NRS5040T220MMGK



■ Features

- Item Summary
22uH±20%, 1.4A, 4.9x4.9x4.0mm
- Lifecycle Stage
New PN available
- Standard packaging quantity (minimum)
Taping Embossed 1500pcs

■ Products characteristics table

Inductance	22 uH ± 20 %
Case Size (mm)	4.9x4.9
Rated Current (max)	1.4 A
Saturation Current (max)	1.5 A (ΔL=30%)
Saturation Current (typ)	1.58 A (ΔL=30%)
Temperature Rise Current (max)	1.4 A (ΔT=40°C)
Temperature Rise Current (typ)	1.47 A (ΔT=40°C)
DC Resistance (max)	0.1638 Ω
DC Resistance (typ)	0.126 Ω
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	9 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

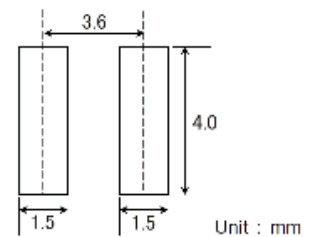
■ External Dimensions

Dimension L	4.9 ± 0.2 mm
Dimension W	4.9 ± 0.2 mm
Dimension H	Max 4.0 mm
Dimension e	1.2 ± 0.2 mm
Dimension f	3.3 ± 0.2 mm
Dimension ΔI	Typ 1.3 mm

■ Recommended Land Patterns

【推奨のランドパターン】
 二層基板の場合
 ・両面にランドパターンを形成し、両面にハンダを塗布して実装すること。
 ・両面にハンダを塗布し、両面にランドパターンを形成すること。

【Printed Circuit Board Pattern】
 Surface Mounting
 ・If a two-sided board is used, it is recommended to apply solder to both sides.
 ・Apply the soldering process to both products and the board.



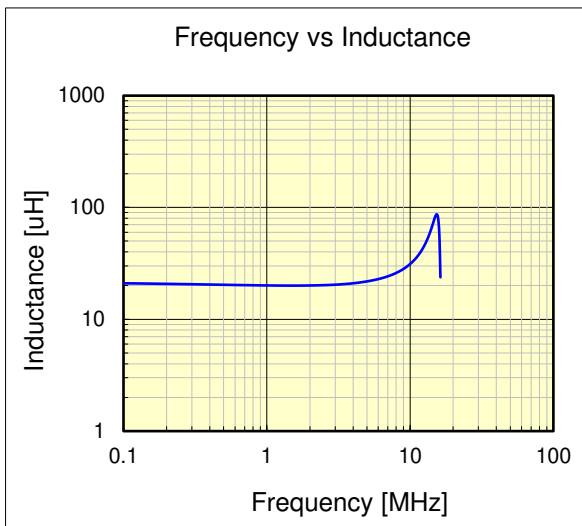
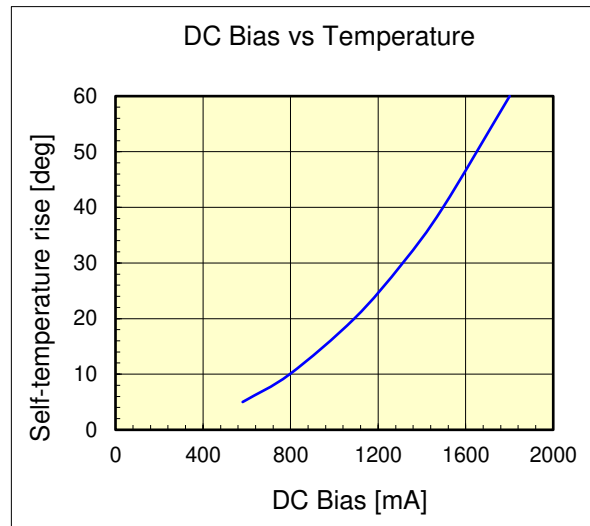
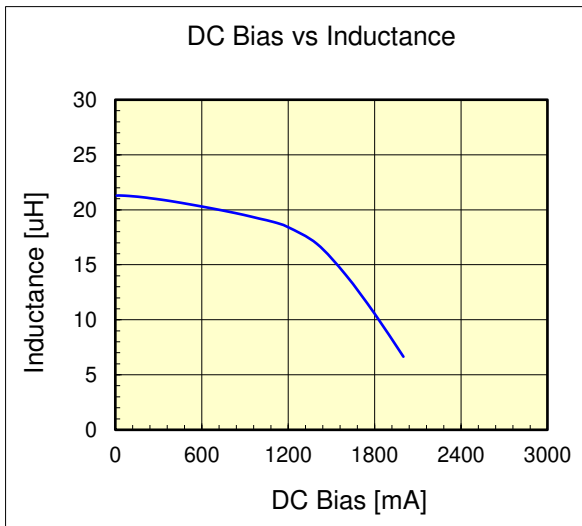
SMD Power Inductors (NR series S type)

NRS5040T220MMGK



Dimension	unit : mm	unit : inch
Length :	4.9 +/- 0.2	(0.193 +/- 0.008)
Width :	4.9 +/- 0.2	(0.193 +/- 0.008)
Height :	4.0 max.	(0.157 max.)

Inductance :	22	uH (test freq at 0.1MHz)
DC Resistance :	0.126 / 0.1638	ohm (typ / max)
Saturation Current :	1,500	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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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).
When our products are used even for high safety and/or reliability-required devices or circuits of general electronic equipment, it is strongly recommended to perform a thorough safety evaluation prior to use of our products and to install a protection circuit as necessary.
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