

# NRS5012T2R2MMGFV



### ■ Features

- Item Summary  
2.2uH±20%, 2A, 4.9x4.9x1.2mm
- Lifecycle Stage  
Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)  
Taping Embossed 1000pcs

### ■ Products characteristics table

Inductance	2.2 uH ± 20 %
Case Size (mm)	4.9x4.9
Rated Current (max)	2 A
Saturation Current (max)	3.1 A
Temperature Rise Current (max)	2 A
DC Resistance (max)	102 mΩ
DC Resistance (typ)	85 mΩ
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	70 MHz
Operating Temp. Range	-40 to +125 °C (Including-self-generated heat)
Temperature characteristic (Inductance change)	± 20 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 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 1.2 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。また、ご購入の際は、本製品のハンダ付けはリフローハンダ工法に限りません。

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



SMD Power Inductors for Industrial / Automotive Comfort and Safety Applications  
(NR series S type)(AEC-Q200 qualified)

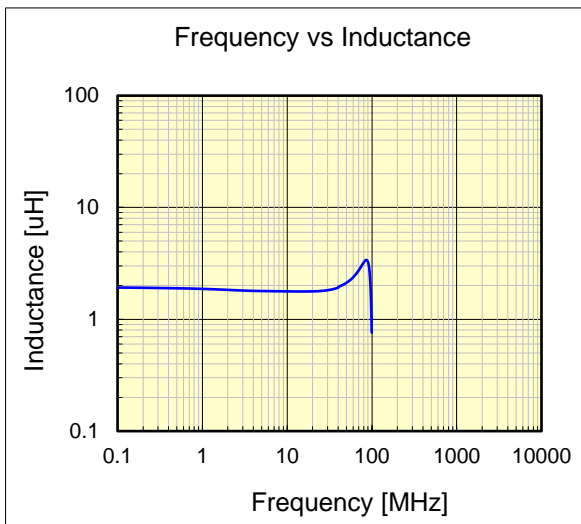
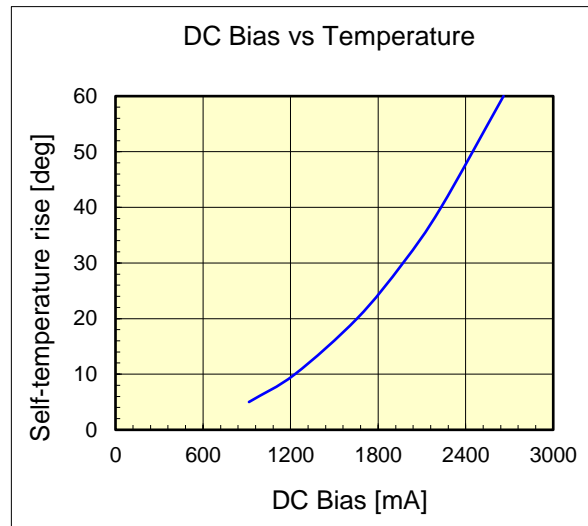
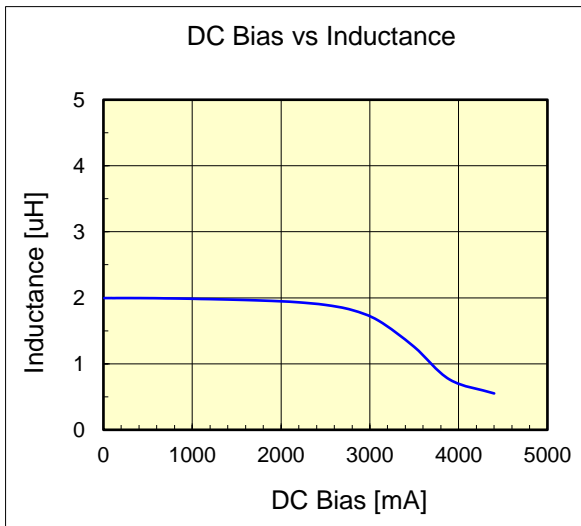
**NRS5012T2R2MMGFV**



**AEC-Q200 qualified**

Dimension	unit : mm	unit : inch
Length :	4.9 +/- 0.2	( 0.193 +/- 0.008 )
Width :	4.9 +/- 0.2	( 0.193 +/- 0.008 )
Height :	1.2 max.	( 0.047 max. )

Inductance :	2.2	uH ( test freq at 0.1MHz )
DC Resistance :	0.085 / 0.102	ohm ( typ / max )
Saturation Current :	3,100	mA ( max )
Temp. rise Current :	2,000	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.

The products are tested based on the test conditions and methods defined in AEC-Q200. Please consult with TAIYO YUDEN for the details of the product specification and AEC-Q200 test results, etc., and please review and approve TAIYO YUDEN's product specification before ordering.