

## Inductors

## NRH3012TR47NN



## ■ Features

- Item Summary  
0.47uH±30%, 1.9A, 3.0x3.0x1.2mm
- Lifecycle Stage  
New PN available
- Standard packaging quantity (minimum)  
Taping Embossed 2000pcs

## ■ Products characteristics table

Inductance	0.47 uH ± 30 %
Case Size (mm)	3.0x3.0
Rated Current (max)	1.9 A
Saturation Current (max)	2.6 A (ΔL=30%)
Saturation Current (typ)	3.2 A (ΔL=30%)
Temperature Rise Current (max)	1.9 A (ΔT=40°C)
Temperature Rise Current (typ)	2.28 A (ΔT=40°C)
DC Resistance (max)	39.6 mΩ
DC Resistance (typ)	33 mΩ
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	160 MHz
Operating Temp. Range	-25 to +120 °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

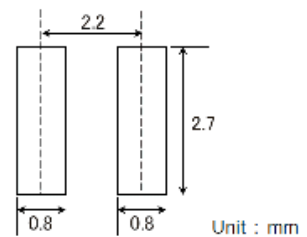
## ■ External Dimensions

Dimension L	3.0 ± 0.1 mm
Dimension W	3.0 ± 0.1 mm
Dimension H	Max 1.2 mm
Dimension e	0.9 ± 0.2 mm
Dimension f	1.9 ± 0.2 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の印刷は必須です。  
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【Printed Land Pattern】  
 ・Two-layer board case  
 ・Printed land pattern on both sides is required.  
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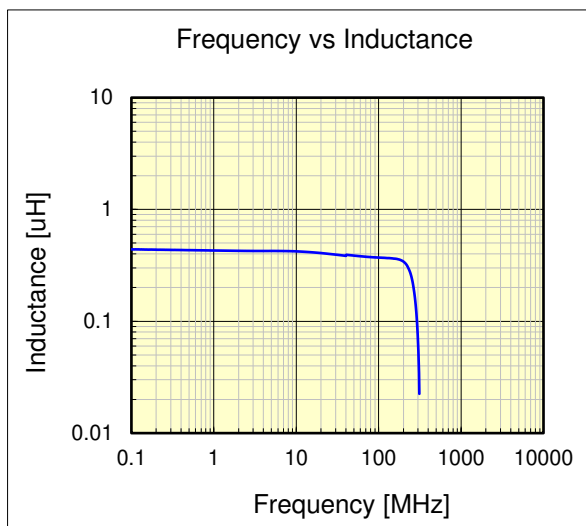
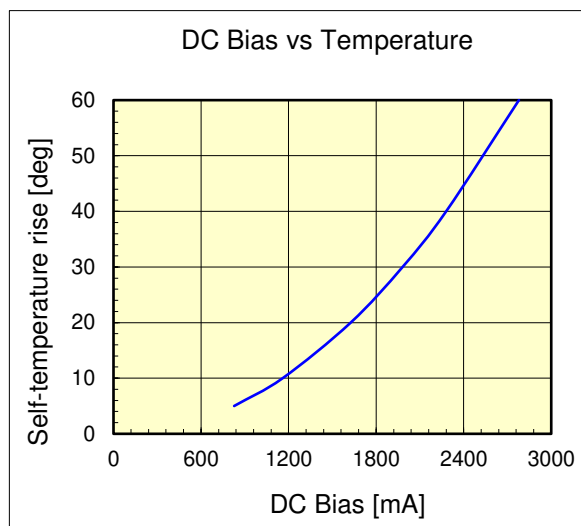
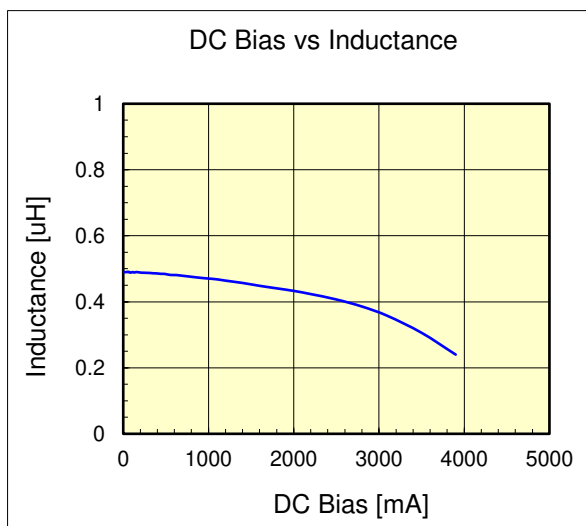
SMD Power Inductors (NR series H type)

NRH3012TR47NN



Dimension	unit : mm	unit : inch
Length :	3.0 +/- 0.1	(0.118 +/- 0.004)
Width :	3.0 +/- 0.1	(0.118 +/- 0.004)
Height :	1.2 max.	(0.047 max.)

Inductance :	0.47	uH (test freq at 0.1MHz)
DC Resistance :	0.033 / 0.0396	ohm (typ / max)
Saturation Current :	2,600	mA (max)
Temp. rise Current :	1,900	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).  
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