

## Inductors

## NRS6045T470MMGK



## ■ Features

- Item Summary  
47uH±20%, 1.15A, 6.0x6.0x4.5mm
- Lifecycle Stage  
New PN available
- Standard packaging quantity (minimum)  
Taping Embossed 1500pcs

## ■ Products characteristics table

Inductance	47 uH ± 20 %
Case Size (mm)	6.0x6.0
Rated Current (max)	1.15 A
Saturation Current (max)	1.4 A (ΔL=30%)
Saturation Current (typ)	1.6 A (ΔL=30%)
Temperature Rise Current (max)	1.15 A (ΔT=40°C)
Temperature Rise Current (typ)	1.35 A (ΔT=40°C)
DC Resistance (max)	0.2743 Ω
DC Resistance (typ)	0.211 Ω
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	5 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

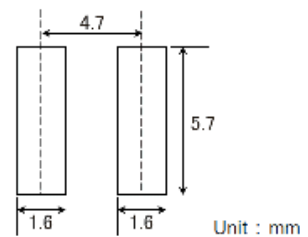
## ■ External Dimensions

Dimension L	6.0 ± 0.2 mm
Dimension W	6.0 ± 0.2 mm
Dimension H	Max 4.5 mm
Dimension e	1.35 ± 0.2 mm
Dimension f	4.0 ± 0.2 mm
Dimension ΔI	Typ 2.3 mm

## ■ Recommended Land Patterns

【推奨のランドパターン】  
 二層基板推奨  
 ・銅箔厚さ0.035mm以上0.05mm以下を推奨（銅箔厚さ0.035mm以下は、銅箔厚さ0.05mmを推奨）  
 ・銅箔厚さ0.035mm以下は、銅箔厚さ0.05mmを推奨

【Printed Circuit Board Pattern】  
 Surface Mounting  
 ・High temperature reflow soldering is recommended for these products.  
 ・Apply the soldering process to these products in reflow soldering only.



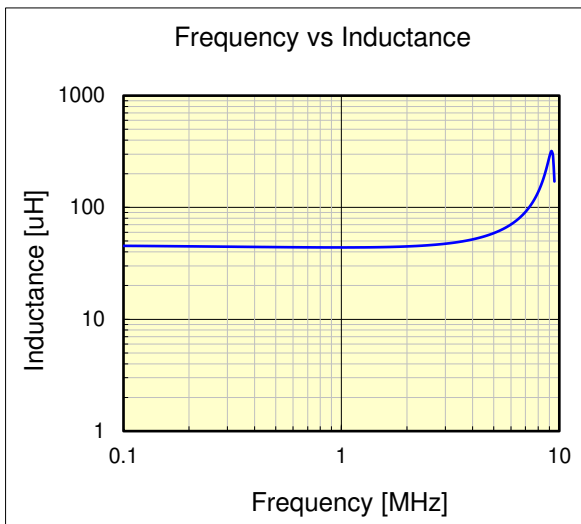
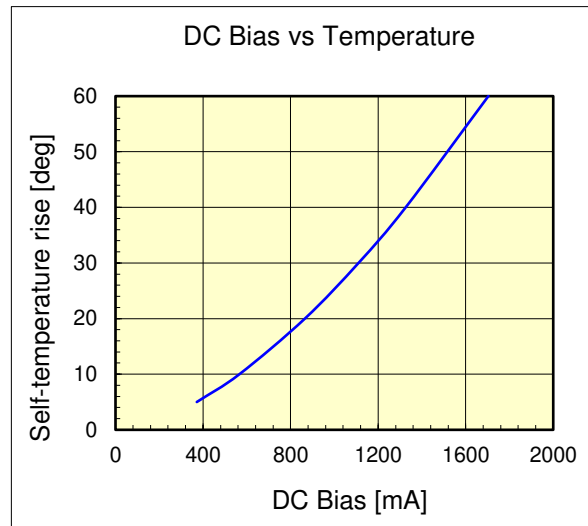
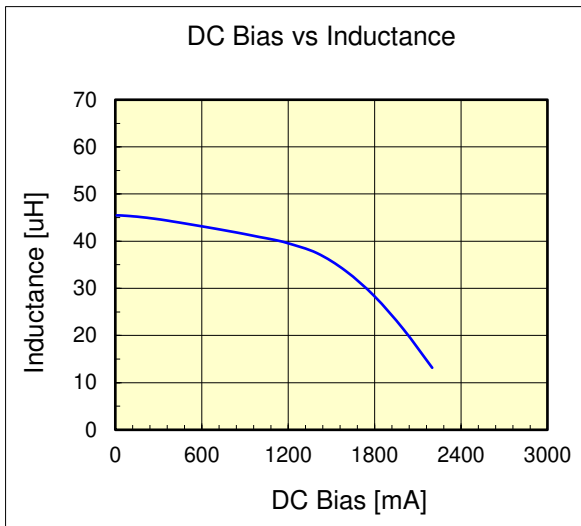
SMD Power Inductors (NR series S type)

NRS6045T470MMGK



Dimension	unit : mm	unit : inch
Length :	6.0 +/- 0.2	( 0.236 +/- 0.008 )
Width :	6.0 +/- 0.2	( 0.236 +/- 0.008 )
Height :	4.5 max.	( 0.177 max. )

Inductance :	47	uH ( test freq at 0.1MHz )
DC Resistance :	0.211 / 0.2743	ohm ( typ / max )
Saturation Current :	1,400	mA ( max )
Temp. rise Current :	1,150	mA ( max )
Saturation current typical : 30% reduction from initial L value.		
Temp rise Current typical : Temperature will rise by 40 deg C		



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