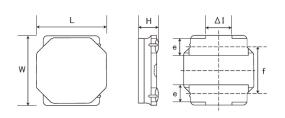
Spec Sheet

SMD Power Inductors for Automotive / Industrial Applications (NR series S type)

NRS6012T5R3MMGJV



Features

- Item Summary
 - 5.3uH±20%, 1.5A, 6.0x6.0x1.2mm
- Lifecycle Stage
- Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)
 - Taping Embossed 1000pcs

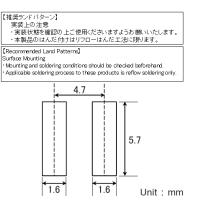
Products characteristics table

Inductance	5.3 uH ± 20 %	
Case Size (mm)	6.0x6.0	
Rated Current (max)	1.5 A	
Saturation Current (max)	1.5 A	
Temperature Rise Current (max)	1.55 A	
DC Resistance (max)	0.15 Ω	
DC Resistance (typ)	0.125 Ω	
LQ Measuring Frequency	100 kHz	
Self Resonant Frequency (min)	34 MHz	
Operating Temp. Range	-40 to +125 ℃ (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	$6.0 \pm 0.2 \text{ mm}$
Dimension W	$6.0 \pm 0.2 \text{ mm}$
Dimension H	Max 1.2 mm
Dimension e	1.35 ±0.2 mm
Dimension f	4.0 ±0.2 mm
Dimension ∆I	Typ 2.3 mm

Recommended Land Patterns

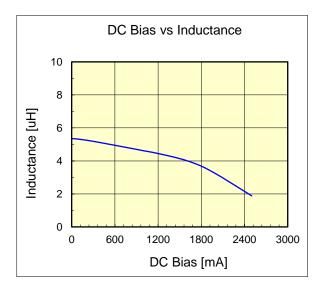


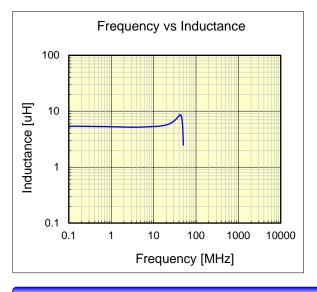
The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the Date at any time without notice. Before making final selection, please check product specification. 2017.04.30

TAIYO YUDEN

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

	Dimension	unit : mm	unit : inch
NRS6012T5R3MMGJV	Length :	6.0 +/-0.2	(0.236 +/- 0.008)
	Width :	6.0 +/-0.2	(0.236 +/- 0.008)
	Height :	1.2 max.	(0.047 max.)
	Inductance : DC Resistance : (Saturation Current : Temp. rise Current :	1,500 mA (m	ax)
•	•		tion from initial L value.
AEC-Q200 qualified	Temp rise Current ty	ypical : Temperatu	re will rise by 40 deg C





DC Bias vs Temperature 60 Self-temperature rise [deg] 50 40 30 20 10 0 600 1200 1800 2400 3000 0 DC Bias [mA]

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.