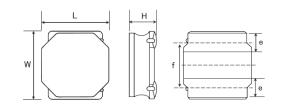
# **Spec Sheet**

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

# NRS2012T1R0NGJV



#### Features

- Item Summary

1.0uH±30%, 1.7A, 2.0x2.0x1.2mm

- Lifecycle Stage
- Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)

Taping Embossed 2500pcs

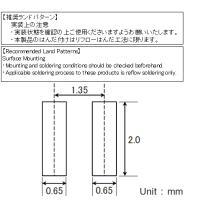
#### Products characteristics table

Inductance	1.0 uH ± 30 %
Case Size (mm)	2.0x2.0
Rated Current (max)	1.7 A
Saturation Current (max)	1.9 A
Temperature Rise Current (max)	1.7 A
DC Resistance (max)	84 mΩ
DC Resistance (typ)	70 mΩ
LQ Measuring Frequency	100 kHz
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

2.0 ±0.1 mm
2.0 ±0.1 mm
Max 1.2 mm
0.5 ±0.2 mm
1.25 ±0.2 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** 

unit : inch

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

Dimension

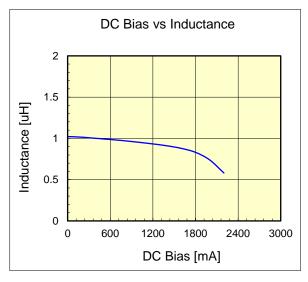
NRS2012T1R0NGJV

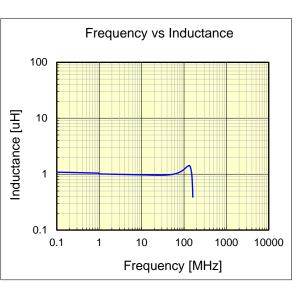


AEC-Q200 qualified

Length : 2.0 + / - 0.1(0.079 +/- 0.004) Width : 2.0 +/- 0.1 (0.079 + / - 0.004)Height : 1.2 (0.047 max. max.) Inductance : 1.0 uН (test freq at 0.1MHz) DC Resistance : 0.07 / 0.084 ohm ( typ / max ) 1,900 mA (max) Saturation Current : Temp. rise Current : 1,700 mA (max) Saturation current typical : 30% reduction from initial L value. Temp rise Current typical : Temperature will rise by 40 deg C

unit : mm





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