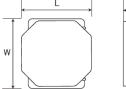
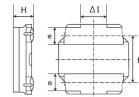
Spec Sheet

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

NRS5012T1R0NMGFV





Features

- Item Summary
 1.0uH±30%, 2.3A, 4.9x4.9x1.2mm
- Lifecycle Stage

Mass Production

- AEC-Q200 qualified
- Standard packaging quantity (minimum)

Taping Embossed 1000pcs

Products characteristics table

Inductance	1.0 uH ± 30 %
Case Size (mm)	4.9x4.9
Rated Current (max)	2.3 A
Saturation Current (max)	4.5 A
Temperature Rise Current (max)	2.3 A
DC Resistance (max)	63.6 mΩ
DC Resistance (typ)	53 mΩ
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	100 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	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 Δ1	Typ 1.3 mm

Recommended Land Patterns



2017.04.30

Unit: mm

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

NRS5012T1R0NMGFV



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.)

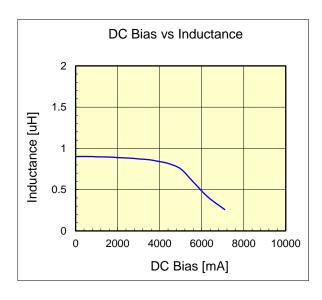
Inductance: 1.0 uH (test freq at 0.1MHz)

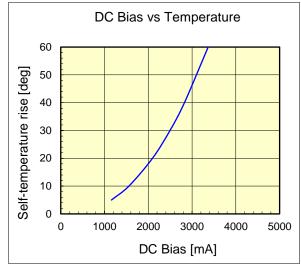
DC Resistance: 0.053 / 0.0636 ohm (typ/max)

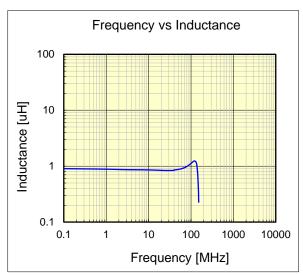
Saturation Current: 4,500 mA (max) Temp. rise Current: 2,300 mA (max)

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.