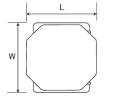
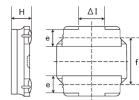
### **Spec Sheet**

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

# NRS5040T4R7NMGKV





#### Features

- Item Summary 4.7uH±30%, 3.1A, 4.9x4.9x4.1mm
- Lifecycle Stage
  - Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)

Taping Embossed 1500pcs

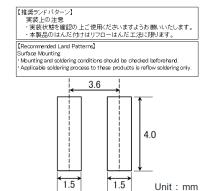
#### Products characteristics table

Inductance	4.7 uH ± 30 %
Case Size (mm)	4.9x4.9
Rated Current (max)	3.1 A
Saturation Current (max)	3.3 A
Temperature Rise Current (max)	3.1 A
DC Resistance (max)	37.7 mΩ
DC Resistance (typ)	29 mΩ
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	28 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 4.1 mm
Dimension e	1.2 ±0.2 mm
Dimension f	3.3 ±0.2 mm
Dimension Δ1	Typ 1.3 mm

# Recommended Land Patterns



2017.05.03

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.

unit: inch

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

## NRS5040T4R7NMGKV

R7NMGKV

Length: 4.9 +/- 0.2 (0.193 +/- 0.008)

Width: 4.9 +/- 0.2 (0.193 +/- 0.008)

Height: 4.1 max. (0.161 max.)

Dimension

Inductance: 4.7 uH (test freq at 0.1MHz)
DC Resistance: 0.029 / 0.0377 ohm (typ / max)

unit : mm

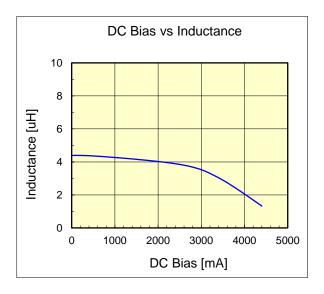
Saturation Current : 3,300 mA (max) Temp. rise Current : 3,100 mA (max)

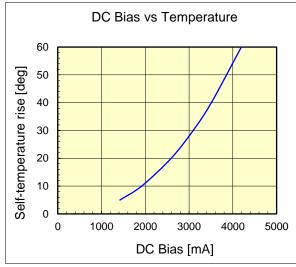
Saturation current typical: 30% reduction from initial L value.

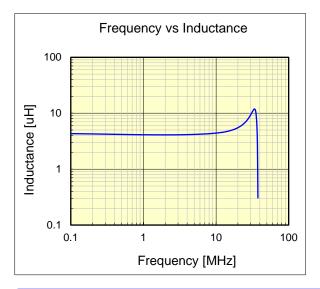
Temp rise Current typical: Temperature will rise by 40 deg C



AEC-Q200 qualified







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.