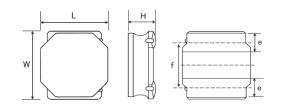
# **Spec Sheet**

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

# NRS4010T6R8MDGGV



#### Features

- Item Summary

6.8uH±20%, 0.8A, 4.0x4.0x1.0mm

- Lifecycle Stage
- Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)
  - Taping Embossed 5000pcs

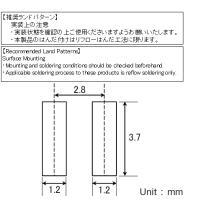
#### Products characteristics table

Inductance	6.8 uH ± 20 %
Case Size (mm)	4.0x4.0
Rated Current (max)	0.8 A
Saturation Current (max)	0.8 A
Temperature Rise Current (max)	1 A
DC Resistance (max)	0.24 Ω
DC Resistance (typ)	0.2 Ω
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	38 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	4.0 ±0.2 mm
Dimension W	4.0 ±0.2 mm
Dimension H	Max 1.0 mm
Dimension e	1.1 ±0.2 mm
Dimension f	2.5 ±0.2 mm

### Recommended Land Patterns

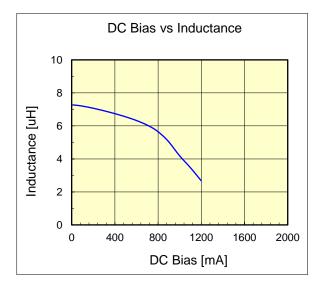


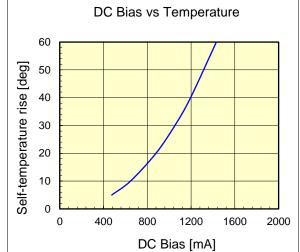
The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the Date at any time without notice. Before making final selection, please check product specification. 2017.04.30

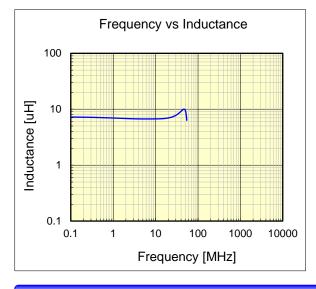
TAIYO YUDEN

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

NRS4010T6R8MDGGV	Dimension	unit : mm		unit : inch	
	Length :	4.0 +/- 0.2		(0.157 +/- 0.008)	
	Width :	4.0 +/- 0.2		(0.157 +/- 0.008)	
	Height :	1.0	max.	( 0.039	max. )
	Inductance : DC Resistance : Saturation Current : Temp. rise Current : Saturation current	800 1,000	uH / 0.24 mA ( max mA ( max 80% reductio	x)	/ max )
AEC-Q200 qualified	Temp rise Current	typical : 7	<i>Cemperature</i>	will rise by 4	0 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.