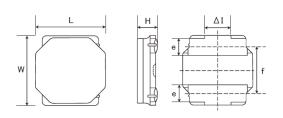
# **Spec Sheet**

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

# NRS6010T220MMGFV



#### Features

- Item Summary

22uH±20%, 0.65A, 6.0x6.0x1.0mm

- Lifecycle Stage
- Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)
  - Taping Embossed 1000pcs

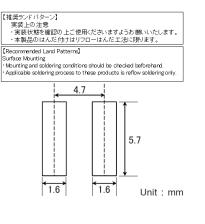
#### Products characteristics table

Inductance	$22 \text{ uH} \pm 20 \%$	
Case Size (mm)	6.0x6.0	
Rated Current (max)	0.65 A	
Saturation Current (max)	0.65 A	
Temperature Rise Current (max)	0.7 A	
DC Resistance (max)	0.696 Ω	
DC Resistance (typ)	0.58 Ω	
LQ Measuring Frequency	100 kHz	
Self Resonant Frequency (min)	12 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 ±0.2 mm
Dimension W	6.0 ±0.2 mm
Dimension H	Max 1.0 mm
Dimension e	1.35 ±0.2 mm
Dimension f	4.0 ±0.2 mm
Dimension <b>Δ</b> I	Typ 2.3 mm

### Recommended Land Patterns

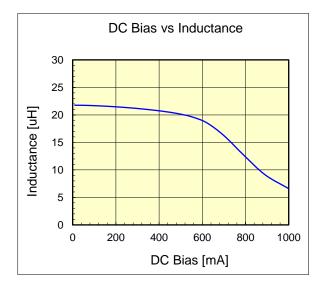


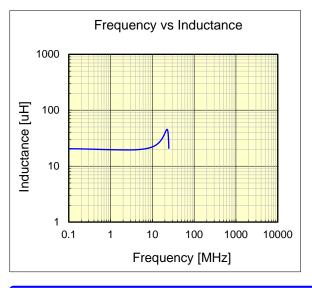
The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the Date at any time without notice. Before making final selection, please check product specification. 2017.04.30

TAIYO YUDEN

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

NRS6010T220MMGFV	Dimension	unit : mm	unit : inch
	Length :	6.0 +/- 0.2	(0.236 +/- 0.008)
	Width :	6.0 +/- 0.2	(0.236 +/- 0.008)
	Height :	1.0 max	. (0.039 max.)
	Inductance : DC Resistance : Saturation Current : Temp. rise Current : Saturation current	650 mA(n 700 mA(n	6 ohm (typ / max) nax)
AEC-Q200 qualified	Temp rise Current	typical : Temperatu	ıre will rise by 40 deg C





DC Bias vs Temperature 60 Self-temperature rise [deg] 50 40 30 20 10 0 200 400 600 800 1000 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.