

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



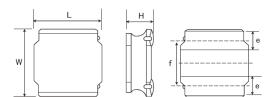




## **Spec Sheet**

# SMD Power Inductors (NR series S type)

## NRS8040T6R8NJGJ



#### Features

- Item Summary 6.8uH±30%, 3.7A, 8.0x8.0x4.2mm
- Lifecycle Stage
  - Mass Production
- Standard packaging quantity (minimum)
  Taping Embossed 1000pcs

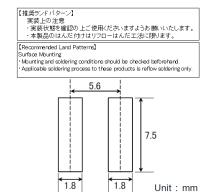
#### Products characteristics table

| Inductance                                     | 6.8 uH ± 30 %                                    |
|--|--|
| Case Size (mm)                                 | 8.0x8.0  |
| Rated Current (max)                            | 3.7 A  |
| Saturation Current (max)                       | 4.4 A  |
| Saturation Current (typ)                       | 4.8 A  |
| Temperature Rise Current (max)                 | 3.7 A  |
| Temperature Rise Current (typ)                 | 4.4 A  |
| DC Resistance (max)                            | 32.5 mΩ  |
| DC Resistance (typ)                            | 25 mΩ  |
| LQ Measuring Frequency                         | 100 kHz  |
| Self Resonant Frequency (min)                  | 24 MHz   |
| Operating Temp. Range                          | -25 to +125 ℃<br>(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 | 8.0 ±0.2 mm |
|-------------|-------------|
| Dimension W | 8.0 ±0.2 mm |
| Dimension H | Max 4.2 mm  |
| Dimension e | 1.6 ±0.3 mm |
| Dimension f | 5.6 ±0.3 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.

## SMD Power Inductors (NR series S type)

### NRS8040T6R8NJGJ



Dimension unit : mm unit: inch Length: 8.0 + / - 0.2(0.315 + / - 0.008)Width: 8.0 +/- 0.2 (0.315 + / - 0.008)Height: 4.2 max. (0.165 max. )

Inductance: 6.8 uН (test freq at 0.1MHz) DC Resistance: 0.025 / 0.0325 ohm (typ/max)

Saturation Current: 4,400 mA (max) Temp. rise Current: 3,700 mA (max)

> Saturation current typical: 30% reduction from initial L value. Temp rise Current typical: Temperature will rise by 40 deg C

