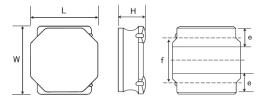
# **Spec Sheet**

# SMD Power Inductors (NR series H type)

# NRH3012T1R0NN



#### Features

- Item Summary1.0uH±30%, 1.71A, 3.0x3.0x1.2mm
- Lifecycle Stage
  - Mass Production
- Standard packaging quantity (minimum)
  Taping Embossed 2000pcs

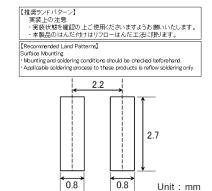
### Products characteristics table

| Inductance                                     | 1.0 uH ± 30 %                                    |
|--|--|
| Case Size (mm)                                 | 3.0x3.0  |
| Rated Current (max)                            | 1.71 A   |
| Saturation Current (max)                       | 2.2 A  |
| Saturation Current (typ)                       | 2.5 A  |
| Temperature Rise Current (max)                 | 1.71 A   |
| Temperature Rise Current (typ)                 | 1.97 A   |
| DC Resistance (max)                            | 57.6 mΩ  |
| DC Resistance (typ)                            | 48 mΩ  |
| LQ Measuring Frequency                         | 100 kHz  |
| Self Resonant Frequency (min)                  | 111 MHz  |
| Operating Temp. Range                          | -25 to +120 ℃<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 | 3.0 ±0.1 mm |
|-------------|-------------|
| Dimension W | 3.0 ±0.1 mm |
| Dimension H | Max 1.2 mm  |
| Dimension e | 0.9 ±0.2 mm |
| Dimension f | 1.9 ±0.2 mm |

# Recommended Land Patterns



2017.04.30

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 H type)

### NRH3012T1R0NN



Dimension unit : mm unit: inch Length: 3.0 + / - 0.1(0.118 + / - 0.004)Width: 3.0 +/- 0.1 (0.118 + / - 0.004)max. ) Height: 1.2 (0.047 max.

Inductance: 1.0 иΗ (test freq at 0.1MHz) DC Resistance: 0.048 / 0.0576 ohm (typ/max)

Saturation Current: 2,200 mA ( max ) 1,710 mA ( max ) Temp. rise Current:

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

