

## Inductors

## NS12575T1R2NN



## ■ Features

- Item Summary  
1.2uH±30%, 9.15A, 12.5x12.5x7.5mm
- Lifecycle Stage  
New PN available
- Standard packaging quantity (minimum)  
Taping Embossed 2000pcs(500pcs\*4reel)

## ■ Products characteristics table

|   |   |
|---|---|
| Inductance  | 1.2 uH ± 30 %                                     |
| Case Size (mm)                                    | 12.5x12.5   |
| Rated Current (max)                               | 9.15 A  |
| Saturation Current (max)                          | 18.08 A (ΔL=30%)                                  |
| Temperature Rise Current (max)                    | 9.15 A (ΔT=40°C)                                  |
| DC Resistance (max)                               | 7 mΩ  |
| DC Resistance (typ)                               | 5.8 mΩ  |
| LQ Measuring Frequency                            | 100 kHz   |
| Self Resonant Frequency (min)                     | 101.7 MHz   |
| Operating Temp. Range                             | -40 to +125 °C<br>(Including-self-generated heat) |
| Temperature characteristic<br>(Inductance change) | ± 15 %  |
| RoHS Compliance (10 subst.)                       | Yes   |
| REACH Compliance (223 subst.)                     | Yes   |
| Halogen Free                                      | Yes   |
| Soldering   | Reflow  |

## ■ External Dimensions

|             |              |
|-------------|--------------|
| Dimension L | 12.5 ±0.3 mm |
| Dimension W | 12.5 ±0.3 mm |
| Dimension H | 7.5 ±0.35 mm |
| Dimension a | 3.0 ±0.1 mm  |
| Dimension b | 2.0 ±0.15 mm |

## ■ Recommended Land Patterns

【推奨のランドパターン】  
 同様に、ランドパターンの寸法は、以下の通りです。  
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【Dimensional Land Pattern】  
 The land pattern dimensions should be as follows.  
 Same as above.  
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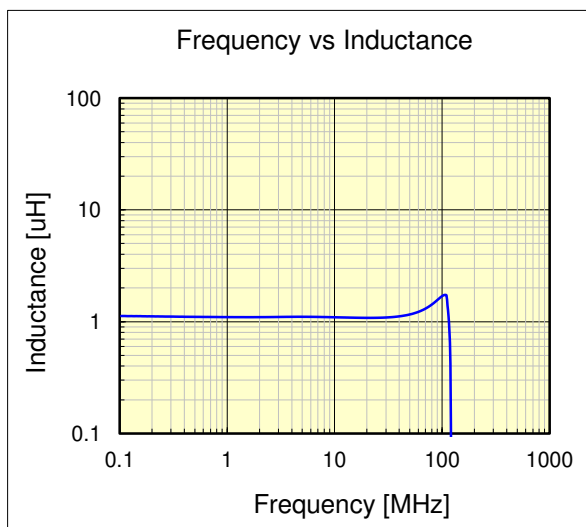
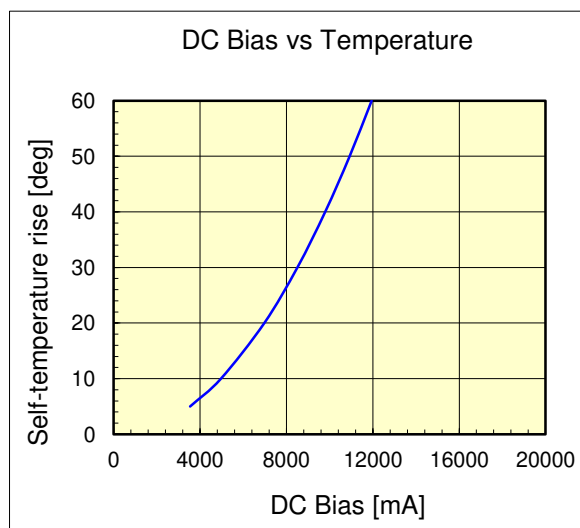
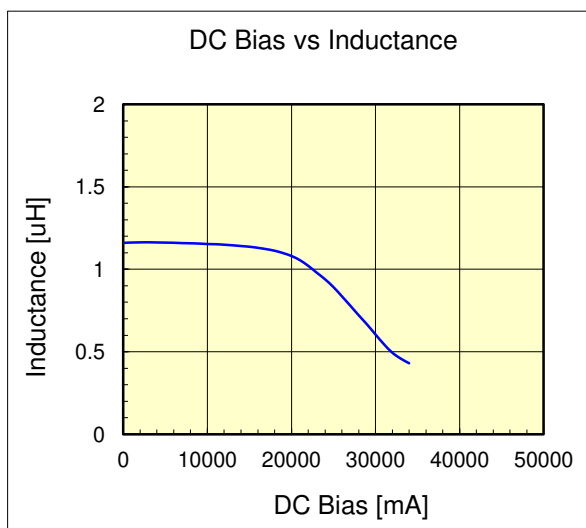
SMD Power Inductors (NS series)

NS12575T1R2NN



| Dimension | unit : mm    | unit : inch         |
|-----------|--------------|---------------------|
| Length :  | 12.5 +/- 0.3 | ( 0.492 +/- 0.012 ) |
| Width :   | 12.5 +/- 0.3 | ( 0.492 +/- 0.012 ) |
| Height :  | 7.5 +/- 0.35 | ( 0.295 +/- 0.014 ) |

|  |                  |         |                         |
|--|------------------|---------|-------------------------|
| Inductance :   | 1.2              | $\mu$ H | ( test freq at 0.1MHz ) |
| DC Resistance :  | 0.0058 / 0.00696 | ohm     | ( typ / max )           |
| Saturation Current :   | 18.08            | A       | ( max )                 |
| Temp. rise Current :   | 9.15             | A       | ( max )                 |
| Saturation current typical : 30% reduction from initial L value. |                  |         |                         |
| Temp rise Current typical : Temperature will rise by 40 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.

Please read this notice before using the TAIYO YUDEN products.



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