

# Inductors

## NS12555T102MN



### ■ Features

- Item Summary  
1000uH±20%, 0.47A, 12.5x12.5x5.5mm
- Lifecycle Stage  
New PN available
- Standard packaging quantity (minimum)  
Taping Embossed 2000pcs(500pcs\*4reel)

### ■ Products characteristics table

|   |   |
|---|---|
| Inductance  | 1000 uH ± 20 %                                    |
| Case Size (mm)                                    | 12.5x12.5   |
| Rated Current (max)                               | 0.47 A  |
| Saturation Current (max)                          | 0.47 A (ΔL=30%)                                   |
| Temperature Rise Current (max)                    | 0.59 A (ΔT=40°C)                                  |
| DC Resistance (max)                               | 1.35 Ω  |
| DC Resistance (typ)                               | 1.12 Ω  |
| LQ Measuring Frequency                            | 100 kHz   |
| Self Resonant Frequency (min)                     | 2 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 | 5.5 ±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】  
 両面テープ  
 ・両面テープの両面にランドパターンを形成する。  
 ・両面テープの両面にランドパターンを形成する。

【Dimension List (mm)】  
 Surface Mounting  
 ・Flux is not to be kept on the inductor body after reflow.  
 ・Apply the soldering process to these products in reflow soldering.



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.

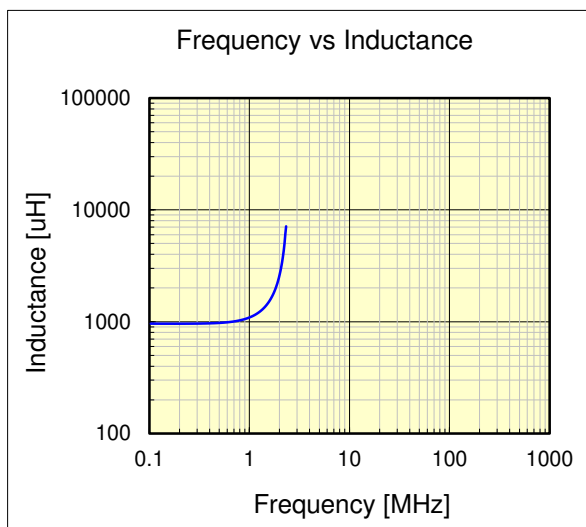
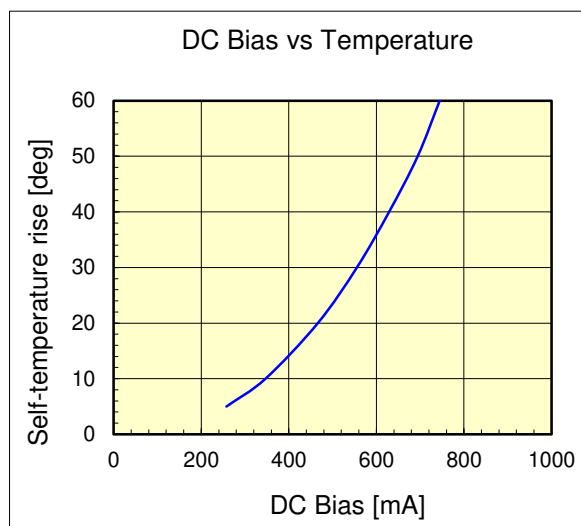
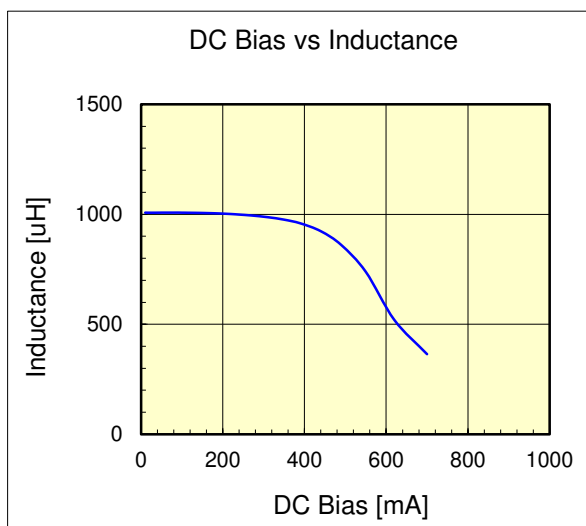
SMD Power Inductors (NS series)

NS12555T102MN



| Dimension | unit : mm    | unit : inch         |
|-----------|--------------|---------------------|
| Length :  | 12.5 +/- 0.3 | ( 0.492 +/- 0.012 ) |
| Width :   | 12.5 +/- 0.3 | ( 0.492 +/- 0.012 ) |
| Height :  | 5.5 +/- 0.35 | ( 0.217 +/- 0.014 ) |

|  |              |                            |
|--|--------------|----------------------------|
| Inductance :   | 1000         | uH ( test freq at 0.1MHz ) |
| DC Resistance :  | 1.12 / 1.344 | ohm ( typ / max )          |
| Saturation Current :   | 0.47         | A ( max )                  |
| Temp. rise Current :   | 0.59         | A ( max )                  |
| Saturation current typical : 30% reduction from initial L value. |              |                            |
| Temp rise Current typical : Temperature will rise by 40 deg C    |              |                            |



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Please read this notice before using the TAIYO YUDEN products.



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Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).  
When our products are used even for high safety and/or reliability-required devices or circuits of general electronic equipment, it is strongly recommended to perform a thorough safety evaluation prior to use of our products and to install a protection circuit as necessary.  
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