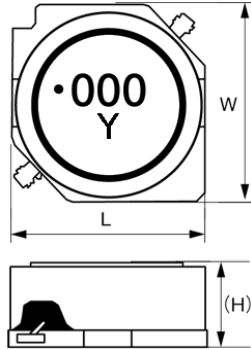


# SMD Power Inductors (NS series)

## NS10145T100MNA



### ■ Features

- Item Summary  
10  $\mu$ H( $\pm$ 20%), 4.22A, 3.77A
- Lifecycle Stage  
Mass Production
- Standard packaging quantity (minimum)  
Taping 2000pcs(500pcs\*4reel)

### ■ Products characteristics table

|   |                        |
|---|------------------------|
| CaseSize (EIA/JIS)                      | -/101101               |
| Inductance                              | 10 $\mu$ H( $\pm$ 20%) |
| Inductance Measuring Frequency          | 100kHz                 |
| Rated Current -Saturation Current       | 4.22A                  |
| Rated Current -Temperature Rise Current | 3.77A                  |
| DC Resistance (max)                     | 0.02976 $\Omega$       |
| Avg. of DC.Resistance                   | 0.0248 $\Omega$        |
| Self-resonant Frequency (min)           | 21.6MHz                |
| RoHS Compliance                         | Yes                    |
| Halogen Free                            | Yes                    |
| Soldering Method                        | Reflow                 |

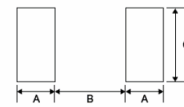
### ■ External Dimensions

|   |                  |
|---|------------------|
| L | 10.1mm $\pm$ 0.3 |
| W | 10.1mm $\pm$ 0.3 |
| H | 4.5mm $\pm$ 0.35 |

### ■ Recommended Land Patterns

【推奨ランドパターン】  
実装上の注意  
・実装状態を確認の上ご使用くださいませようお願いします。  
・本製品のはんだ付けはリフローはんだ工法に限ります。

【Recommended Land Patterns】  
Surface Mounting  
・Mounting and soldering conditions should be checked beforehand.  
・Applicable soldering process to these products is reflow soldering only.



SMD Power Inductors (NS series)

| Type     | A   | B   | C   |
|----------|-----|-----|-----|
| NS 10145 | 2.5 | 5.6 | 3.2 |
| NS 10155 | 2.6 | 5.6 | 3.2 |
| NS 10165 | 2.5 | 5.6 | 3.2 |
| NS 12555 | 2.5 | 8.6 | 3.2 |
| NS 12565 | 2.5 | 8.6 | 3.2 |
| NS 12575 | 2.5 | 8.6 | 3.2 |

unit:mm

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.

2015.03.09

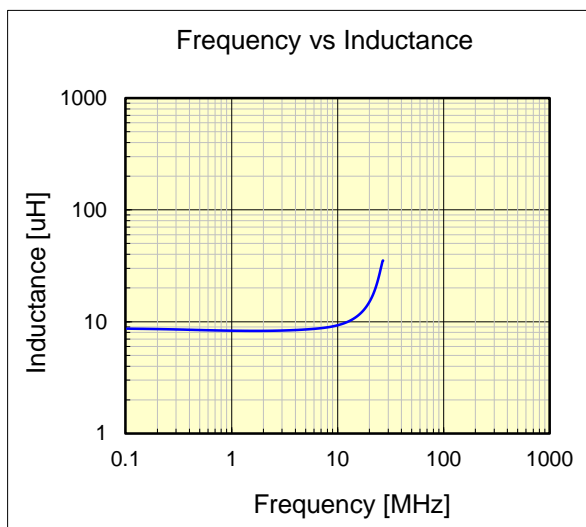
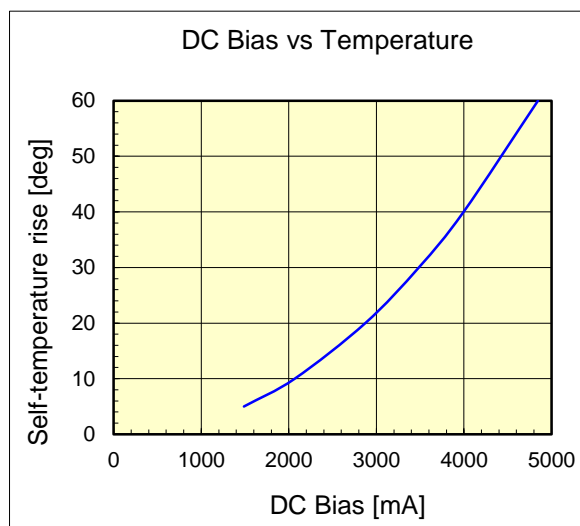
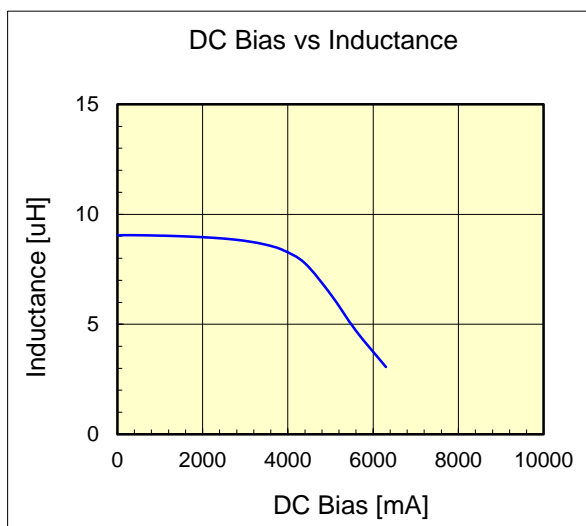
SMD Power Inductors (NS series)

NS10145T100MNA



| Dimension | unit : mm    | unit : inch         |
|-----------|--------------|---------------------|
| Length :  | 10.1 +/- 0.3 | ( 0.398 +/- 0.012 ) |
| Width :   | 10.1 +/- 0.3 | ( 0.398 +/- 0.012 ) |
| Height :  | 4.5 +/- 0.35 | ( 0.177 +/- 0.014 ) |

|  |                  |     |                         |
|--|------------------|-----|-------------------------|
| Inductance :   | 10               | uH  | ( test freq at 0.1MHz ) |
| DC Resistance :  | 0.0248 / 0.02976 | ohm | ( typ / max )           |
| Saturation Current :   | 4.22             | A   | ( max )                 |
| Temp. rise Current :   | 3.77             | 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.