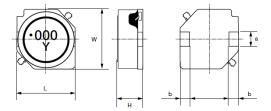
### **Spec Sheet**

# SMD Power Inductors (NS series)

## NS10165T3R3NNA



#### Features

- Item Summary
   3.3uH±30%, 6.76A, 10.1x10.1x6.5mm
- Lifecycle Stage
  - Mass Production
- Standard packaging quantity (minimum)
   Taping Embossed 2000pcs(500pcs\*4reel)

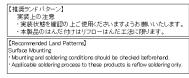
#### Products characteristics table

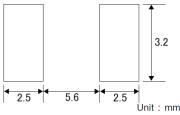
Inductance	3.3 uH ± 30 %
Case Size (mm)	10.1x10.1
Rated Current (max)	6.76 A
Saturation Current (max)	9.3 A
Temperature Rise Current (max)	6.76 A
DC Resistance (max)	10.4 mΩ
DC Resistance (typ)	8.6 mΩ
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	42 MHz
Operating Temp. Range	-40 to +125 ℃ (Including-self-generated heat)
Temperature characteristic (Inductance change)	± 15 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

#### External Dimensions

Dimension L	10.1 ±0.3 mm
Dimension W	10.1 ±0.3 mm
Dimension H	6.5 ±0.35 mm
Dimension a	2.8 ±0.1 mm
Dimension b	2.0 ±0.15 mm

#### Recommended Land Patterns





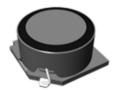
2017.04.30

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 (NS series)

#### NS10165T3R3NNA



Dimension unit: mm unit: inch

Length: 10.1 +/- 0.3 (0.398 +/- 0.012)

Width: 10.1 +/- 0.3 (0.398 +/- 0.012)

Height: 6.5 +/- 0.35 (0.256 +/- 0.014)

Inductance: 3.3 uH (test freq at 0.1MHz)

DC Resistance: 0.0086 / 0.01032 ohm (typ / max)

Saturation Current: 9.30 A (max) Temp. rise Current: 6.76 A (max)

Saturation current typical: 30% reduction from initial L value.

Temp rise Current typical: Temperature will rise by 40 deg C

