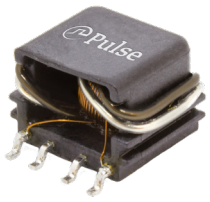
# THE DATASHEET OF

# PH9500.100NLT

# SMT Current Sense Transformer

*PH9500.XXXNL*

Pulse
a YAGEO company



- ***Insulation:*** *Basic, 8.2mm creepage*
- ***Height:*** *8.8mm Max*
- ***Footprint:*** *13mm x 14mm Max*
- ***Current Rating:*** *up to 10A*
- ***Patented:*** *US Patent 9,646,755*

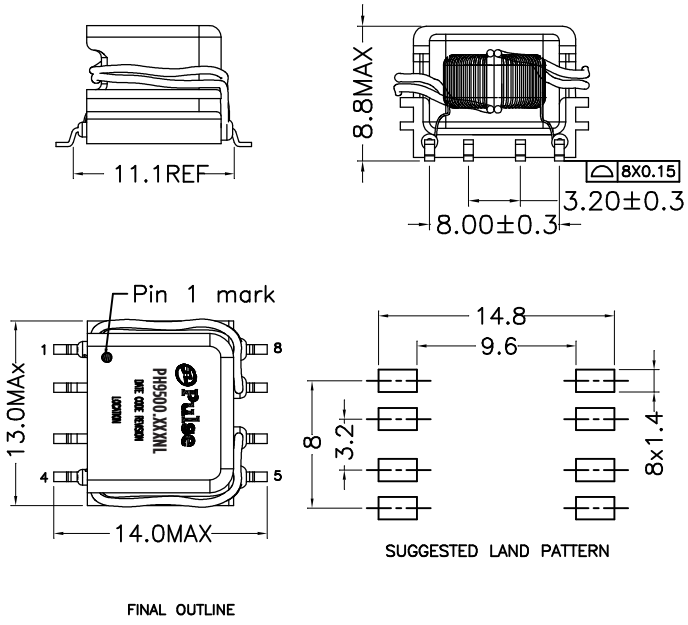
**Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C**

| Part [5,6] Number | Turns Ratio | Current[2] Rating (A) | Secondary Inductance (mH MIN) | DCR (mΩ Max) | | Hipot ($V_{DC}$) |
|---|---|---|---|---|---|---|
| | | | | Primary (7,8-5,6) | Secondary (1-4) | |
| PH9500.065NL | 1:65 | 10 | 2.0 | 3 | 1620 | 4400 |
| PH9500.100NL | 1:100 | 10 | 10.0 | 3 | 2100 | 4400 |

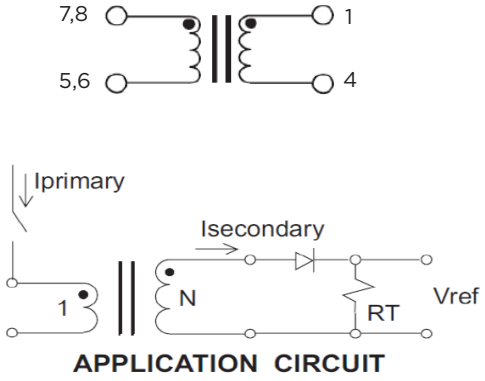
**NOTES:**

1. The temperature of component (ambient temperature plus temper-ature rise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.
3. To calculate value of terminating resistor (Rt) use the following formula:
   Rt (W) = $V_{REF}$ * N / (Ipeak_primary)
4. The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for uni-polar current use following formula:
   Bpk = 23.81 * $V_{REF}$ * (Duty_Cycle_Max) * $10^5$ / (N * Freq_kHz)
   * for bi-polar current applications divide Bpk (as calculated above) by 2.
5. Optional Tape & Reel packaging can be ordered by adding a "**T**" suffix to the part number (i.e. PH9500.065NL becomes PH9500.065NLT). Pulse complies to industry standard tape and reel specification EIA481.
6. The "**NL**" suffix indicates an RoHS-compliant part number.

## Mechanical




## Schematic




Weight . . . . . .0.34 grams
Tray . . . . . .45/tray
Tape & Reel . . . . . .220/reel

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

## For More Information

**Americas -** prodinfo_power_americas@yageo.com | **Europe -** prodinfo_power_emea@yageo.com | **Asia -** prodinfo_power_asia@yageo.com

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