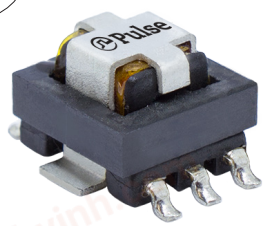
chanhvinh.com

# SMT Current Sense Transformer

*PH9494.XXXNLT EE8 SMD Platform*

Pulse
a YAGEO company



- **Isolation:** 2250Vdc
- **Height:** 7.2mm Max
- **Footprint:** 12.8mm x 9.7mm Max
- **Current Rating:** up to 30A
- **Operating Frequency:** Greater than 20kHZ

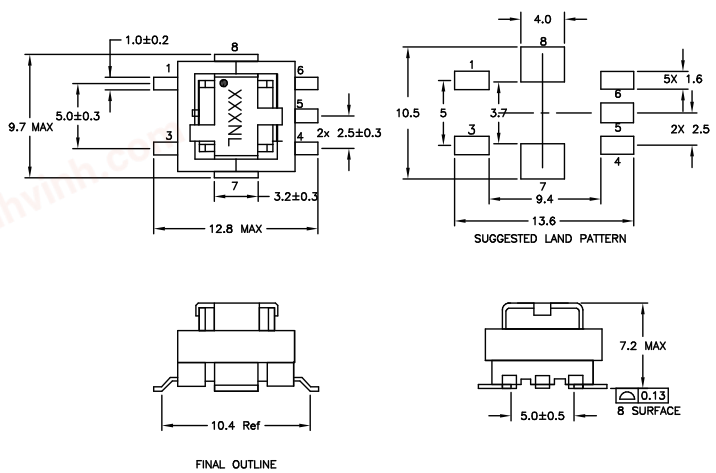
**Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C**

| Part Number | Turns Ratio ±0.95 | Current[2] Rating (A) | Secondary Inductance (mH Min) | DCR | | Hipot ($V_{DC}$) |
|---|---|---|---|---|---|---|
| | | | | Primary (8-7)(mΩ Max) | Secondary (1-3)(Ω Max) | |
| PH9494.050NLT | 50 | 30 | 0.63 | 0.35 | 0.60 | 2250 |
| PH9494.100NLT | 100 | 30 | 2.50 | 0.35 | 3.00 | 2250 |
| PH9494.150NLT | 150 | 30 | 5.63 | 0.35 | 5.70 | 2250 |
| PH9494.200NLT | 200 | 30 | 10.0 | 0.35 | 10.0 | 2250 |

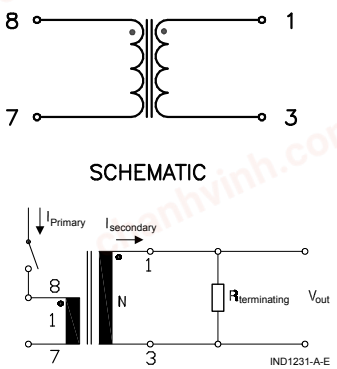
**NOTES:**

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 .
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 2200 Gauss. To calculate the peak flux density for uni-polar current use following formula:
   Bpk = 18.8* $V_{REF}$ * (Duty_Cycle_Max) * $10^5$ / (N * Freq_kHz)
   * for bi-polar current applications divide Bpk (as calculated above) by 2.
5. Tape & Reel packaging . Pulse complies to industry standard tape and reel specification EIA481.

## Mechanical




## Schematic




**Application circuit and pinning**

Weight . . . . . 1.2 grams

Tape & Reel . . . . . 450/reel

Dimensions: mm

Unless otherwise specified, all tolerances are ± 0.25

chanhvinh.com

# SMT Current Sense Transformer

*PH9494.XXXNLT EE8 SMD Platform*

**For More Information:**

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

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2023. Pulse Electronics, Inc. All rights reserved.