

# SMT Current Sense Transforms

PE-68XXXNL Series



- Height:** 7.1mm Max
- Footprint:** 14.6mm x 12.6mm Max
- Current Rating:** up to 15A
- Frequency Range:** 50kHz to 500kHz

## Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C

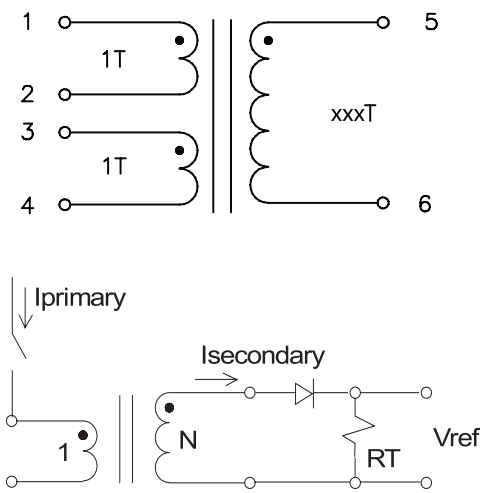
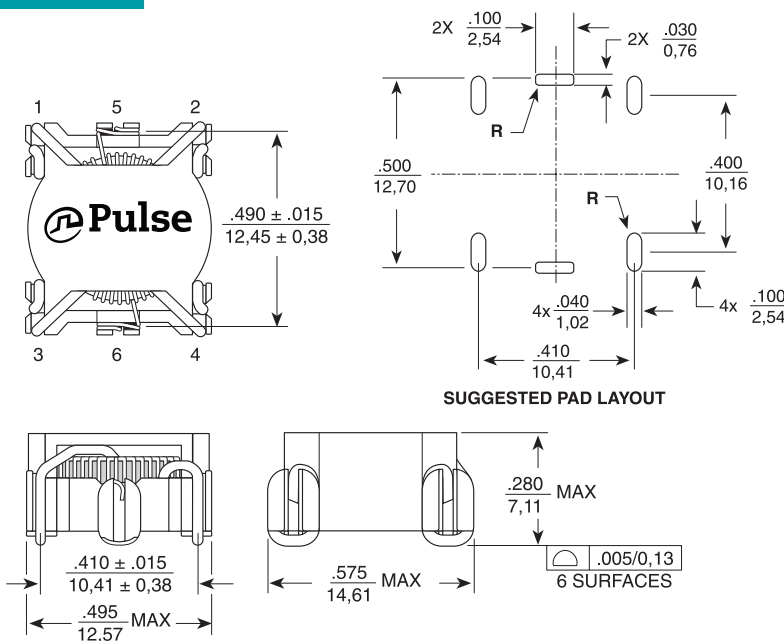
Part <sup>5,6</sup> Number	Turns Ratio	Current <sup>2</sup> Rating	Secondary Inductance (mH MIN)	DCR (mΩ MAX)		Hipot (V <sub>RMS</sub> )
				Primary (1,3-2,4)	Secondary (5-6)	
PE-68210NL	1:1:50	15	3.8	1.15	380	500
PE-68280NL	1:1:100	15	14.8	1.15	930	500
PE-68383NL	1:1:200	15	59.2	1.15	3900	500

- Notes:**
- The temperature of the component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
  - 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.
  - To calculate the value of the terminating resistor (R<sub>t</sub>) use the following formula:  
 $R_t (\Omega) = V_{REF} * N / (I_{peak\_primary})$
  - 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:  
 $BPK = 14.29 * V_{REF} * (Duty\_Cycle\_Max) * 10^5 / (N * Freq\_kHz)$   
 \* for bi-polar current applications divide BPK (as calculated above) by 2.
  - Optional Tape & Packaging can be ordered by adding a "T" suffix to the part number (i.e. PE-68210NL becomes PE-68210NLT). Pulse complies to the industry standard tape and reel specification EIA481.
  - The "NL" suffix indicates an RoHS-compliant part number. Non-NL suffixed parts are not necessarily RoHS compliant, but are electrically and mechanically equivalent to NL versions. If a part number does not have the "NL" suffix, but an RoHS compliant version is required, please contact Pulse for availability.

## Mechanical

## Schematic

PE-XXXXNL



**Dimensions:** Inches  
mm  
 Unless otherwise specified,  
 all tolerances are: ±  $\frac{.010}{0,25}$

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## For More Information

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