

# 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:  

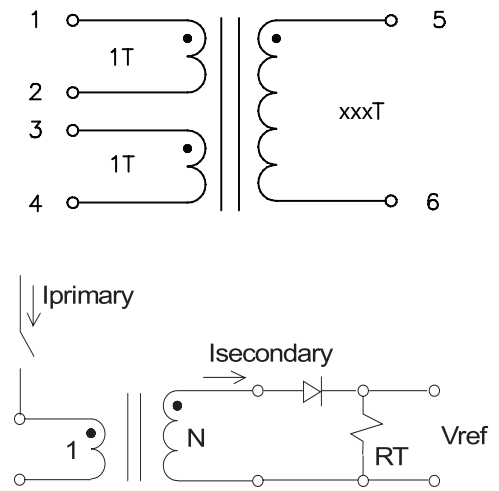
$$R_t (\Omega) = V_{REF} * N / (I_{peak\_primary})$$
  - The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for uni-polar current use following formula:  

$$BPK = 14.29 * V_{REF} * (Duty\_Cycle\_Max) * 10^5 / (N * Freq\_kHz)$$
\* 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-XXXXXNL



**Dimensions:** Inches / mm  
 Unless otherwise specified,  
 all tolerances are: ±  $\frac{.010}{0.25}$

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## For More Information

### Pulse Worldwide Headquarters

15255 Innovation Drive Ste 100  
San Diego, CA 92128  
U.S.A.

Tel: 858 674 8100  
Fax: 858 674 8262

### Pulse Europe

Pulse Electronics GmbH  
Am Rottland 12  
58540 Meinerzhagen  
Germany

Tel: 49 2354 777 100  
Fax: 49 2354 777 168

### Pulse China Headquarters

Pulse Electronics (ShenZhen) CO., LTD  
D708, Shenzhen Academy of  
Aerospace Technology,  
The 10th Keji South Road,  
Nanshan District, Shenzhen,  
P.R. China 518057

Tel: 86 755 33966678  
Fax: 86 755 33966700

### Pulse North China

Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Road West  
Shanghai 200336  
China

Tel: 86 21 62787060  
Fax: 86 2162786973

### Pulse South Asia

3 Fraser Street 0428  
DUO Tower  
Singapore 189352

Tel: 65 6287 8998  
Fax: 65 6280 0080

### Pulse North Asia

1F., No.111 Xiyuan Road  
Zhongli District  
Taoyuan City 32057  
Taiwan (R.O.C)

Tel: 886 3 4356768  
Fax: 886 3 4356820

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