## **SMT** Current Sense Transforms

PE-68XXXNL Series









Height: 7.1mm Max

**Prootprint:** 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										
			Secondary	DCR (mΩ MAX)						
Part <sup>5,6</sup> Number	Turns Ratio	Current² Rating	Inductance (mH MIN)	Primary (1,3-2,4)	Secondary (5-6)	Hipot (V <sub>RMS</sub> )				
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:

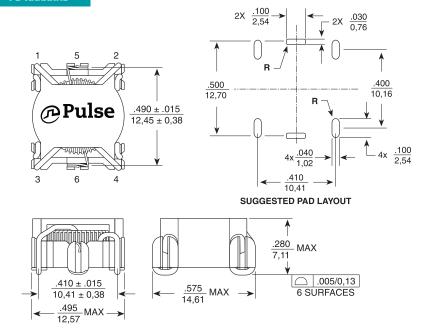
- 1. The temperature of the component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
- The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.
- 3. To calculate the value of the terminating resistor (Rt) use the following formula: Rt  $(\Omega)$  = VREF \* 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:

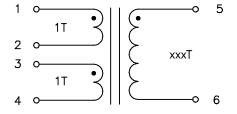
BPK =  $14.29 * V_{RFF} * (Duty\_Cycle\_Max) * 10^5 / (N * Freq\_kHz)$ 

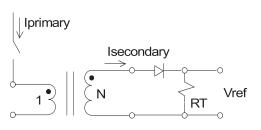
- \* for bi-polar current applications divide BPK (as calculated above) by 2.
- Optional Tape & Packaging can be ordered by adding a "T" suffix to the part number (i.e. PE-68210NL becomes PE-68210NLT). Pulse complies to the industry standard tape and reel specification EIA481.
- 6. The "NL" suffix indicates 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:**  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are:  $\pm \frac{.010}{0.75}$ 

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Pulse Worldwide Headquarters 15255 Innovation Drive Ste 100 San Diego, CA 92128 U.S.A.	Pulse Europe Pulse Electronics GmbH Am Rottland 12 58540 Meinerzhagen Germany	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	Pulse North China Room 2704/2705 Super Ocean Finance Ctr. 2067 Yan An Road West Shanghai 200336 China	Pulse South Asia 3 Fraser Street 0428 DUO Tower Singapore 189352	Pulse North Asia 1F., No.111 Xiyuan Road Zhongli District Taoyuan City 32057 Taiwan (R.O.C)
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Tel: 858 674 8100 Tel: 49 2354 777 100 Tel: 86 755 33966678 Tel: 86 21 62787060 Tel: 65 6287 8998 Tel: 886 3 4356768 Fax: 858 674 8262 Fax: 49 2354 777 168 Fax: 86 755 33966700 Fax: 86 2162786973 Fax: 65 6280 0080 Fax: 886 3 4356820

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