## SMT Current Sense Transforms



5

6

-0

RT

Vref

PE-68XXXNL Series



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

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C									
			Secondary	DCR (m $\Omega$ MAX)					
Part <sup>5,6</sup> Number	Turns Ratio	Current <sup>2</sup> Rating	Inductance (mH MIN)	Primary (1,3-2,4)	Secondary (5-6)	Hipot (Vrms)			
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:

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- 1. The temperature of the component (ambient temperature plus temperature 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 the value of the terminating resistor (Rt) use the following formula: Rt ( $\Omega$ ) = VREF \* N / (lpeak\_primary)
- The peak flux density of the device must remain below 2000 Gauss. To calculate the 4. peak flux density for uni-polar current use following formula:

BPK =  $14.29 \times V_{RFF} \times (Duty_Cycle_Max) \times 10^5 / (N \times Freq_kHz)$ 

\* for bi-polar current applications divide BPK (as calculated above) by 2.

- 5. 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**

## SMT Current Sense Transforms PE-68XXXNL Series



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