

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 ^{5,6} Number	Turns Ratio	Current ² Rating	Secondary Inductance (mH MIN)	DCR (mΩ MAX)		Hipot (V _{RMS})
				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_t) use the following formula:

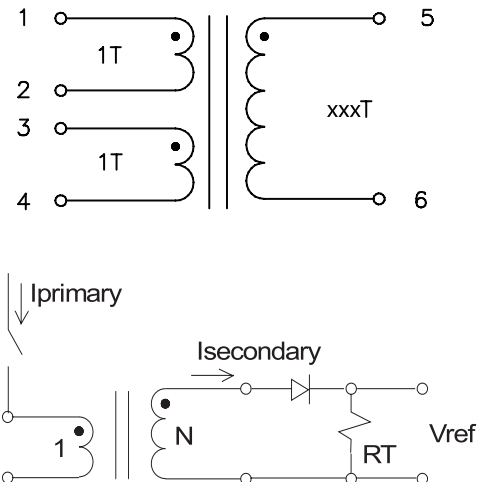
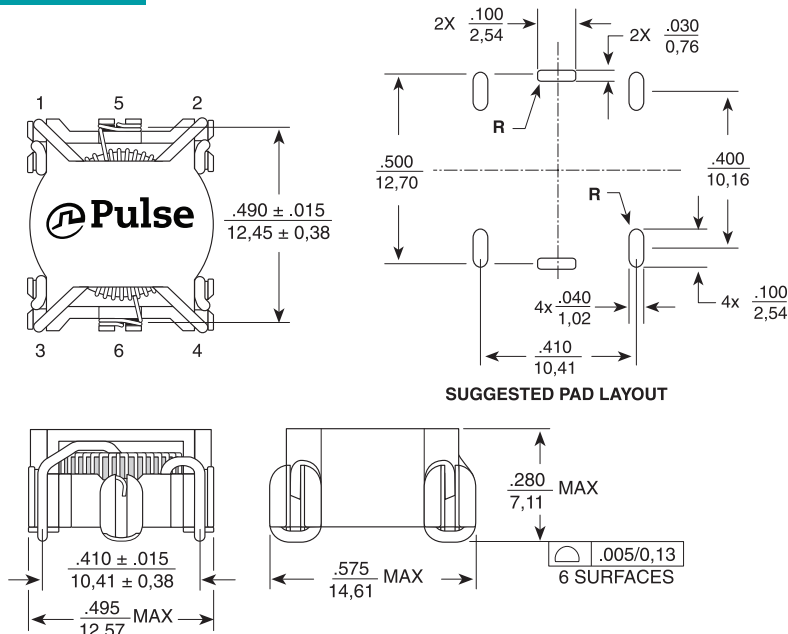
$$R_t (\Omega) = V_{REF} * N / (I_{peak_primary})$$
- The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for uni-polar current use following formula:

$$BPK = 14.29 * V_{REF} * (Duty_Cycle_Max) * 10^5 / (N * Freq_kHz)$$
* 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
 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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