SMT CURRENT SENSE TRANSFORMER



📭 **Storage Temperature:** -55°C to +130°C

• Reflow Temperature: +235°C Max

ITAR: No MSL:1

📭 MTBF: 2,880 Years IAW Mil-HBK-217F Ground Benign Environment

Height: 7.1mm Max

📭 Footprint: 14.6mm x 12.6mm Max

📭 Current Rating: up to 15A

Prequency Range: 50kHz to 500kHz

Electrical Specifications 25°C — Operating Temperature -40°C to +130°C ¹¹						
Part Number	Turns Ratio	Current² Rating (A)	Secondary Inductance (mH MIN)	DCR (m Ω MAX)		Hipot
				Primary (1,3-2,4)	Secondary (5-6)	(VRMS)
PL1349	1:1:100	15	14.8	1.15	930	500

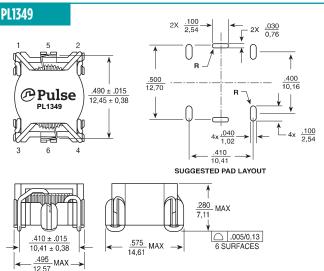
Notes:

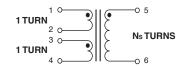
- 1. The temperature of the component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
- 2. The maximum current rating is based upon temperature rise of the component and represents the dc current which will cause a typical temperature rise of 40°C with no air flow when both one turn windings connected in parallel.
- 3. To calculate the value of the terminating resistor (Rt) use the following formula: Rt (Ω) = VREF * N / (Ipeak_primary)
- 4. The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for a uni-polar current use the following formula:

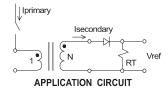
BPK = 14.29 * VREF * (Duty_Cycle_Max) * 105 / (N * Freq_kHz)

- * for bi-polar current applications divide BPK as calculated above by 2.
- 5. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PL1349 becomes PL1349T). Pulse complies to industry standard tape and reel specification EIA481.
- 6. The "NL" suffix indicates an RoHS-compliant part number. Non-NL suffixed parts are not necessar ily RoHS compliant, but are electrically and mechanically equivalent to NL versions. If a part num ber does not have the "NL" suffix, but an RoHS compliant version is required, please contact Pulse for availability.

Mechanical Schematic







 $\frac{\text{Dimensions:}}{mm} \frac{\text{Inches}}{\text{Unless otherwise specified, all tolerances are } \pm .010}{0.25}$

For More Information

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