

SMT Current Sense Transformers

PM820X Series



- Height: 5.5mm Max
- Footprint: 8.4mm x 7.2mm Max
- Current Rating: up to 10A
- Frequency Range: 50kHz to 1MHz
- Lower Primary DCR version available: PA1005.XXX series

Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C						
Part Number	Turns Ratio	Current ² Rating (A)	Secondary Inductance (mH MIN)	DCR (mΩMAX)		Highpot (VRMS)
				Primary (8-7)	Secondary (1-3)	
PM8208NL	1:100	10	2.00	6	5500	500

Notes:

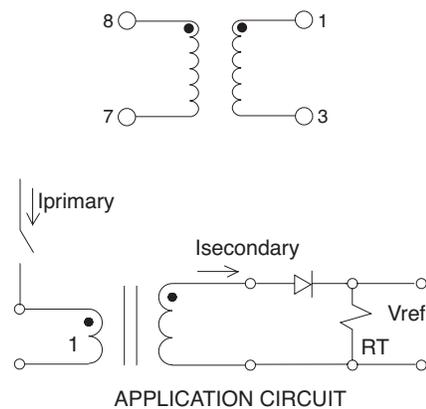
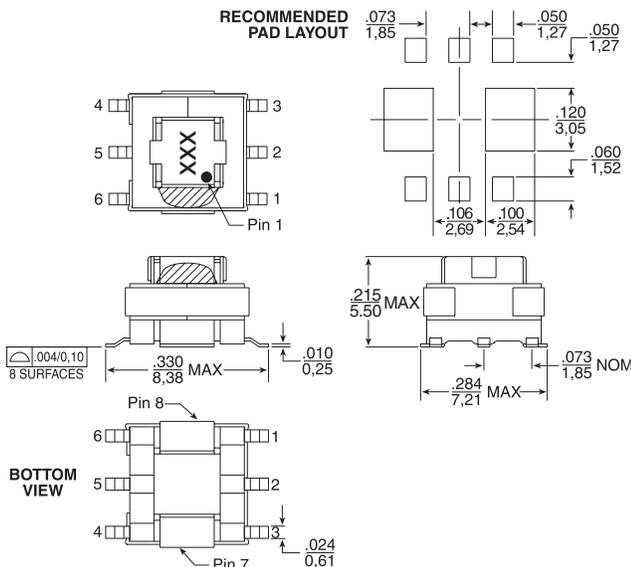
1. The temperature of the component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with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

$$R_t (W) = V_{ref} * N / (I_{peak_primary})$$
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: 1. The maximum volt-usec rating limits the peak flux density to 3600 gauss when used in bi-polar drive application with 200KHz. For unipolar drive applications or a bi-polar drive with 350kHz, a maximum volt-usec could be 60% of the listed value. For Push-Pull topology, where the voltage is applied across half the primary winding turns, the maximum volts-use needs to be derated by 50%.

- $$B_{pk} = 37.59 * V_{ref} * (Duty_Cycle_Max) * 105 / (N * Freq_kHz)$$
- * 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. P8202NL becomes P8202NLT). 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 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



Weight..... 0.34 grams
 Tray..... 120/tray
 Tape & Reel 900/reel
 Coplanarity 0.004 inches

For More Information

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