

SMT CURRENT SENSE TRANSFORMERS

P822X Series



- Height:** 5.1mm Max
- Footprint:** 8.4mm x 7.2mm Max
- Current Rating:** up to 10A
- Frequency Range:** 50kHz to 1MHz
- Reverse Polarity version of P820X**

Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C

Part Number	Turns Ratio	Current Rating ² (A)	Secondary Inductance (mH MIN)	DCR (mΩ MAX)		Hipot (VRMS)
				Primary (8-7)	Secondary (6-4)	
P8222	1:20	10	0.08	6	550	500
P8223	1:30	10	0.18	6	870	500
P8224	1:40	10	0.32	6	1140	500
P8225	1:50	10	0.50	6	1500	500
P8226	1:60	10	0.72	6	1750	500
P8227	1:70	10	0.98	6	4750	500
P8228	1:100	10	2.00	6	5500	500
P8229	1:125	10	3.00	6	6500	500

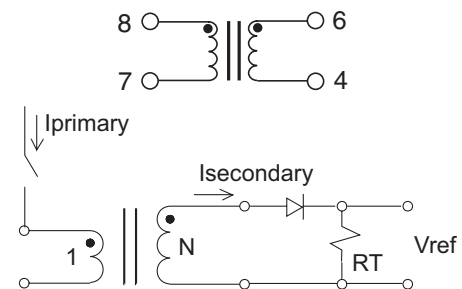
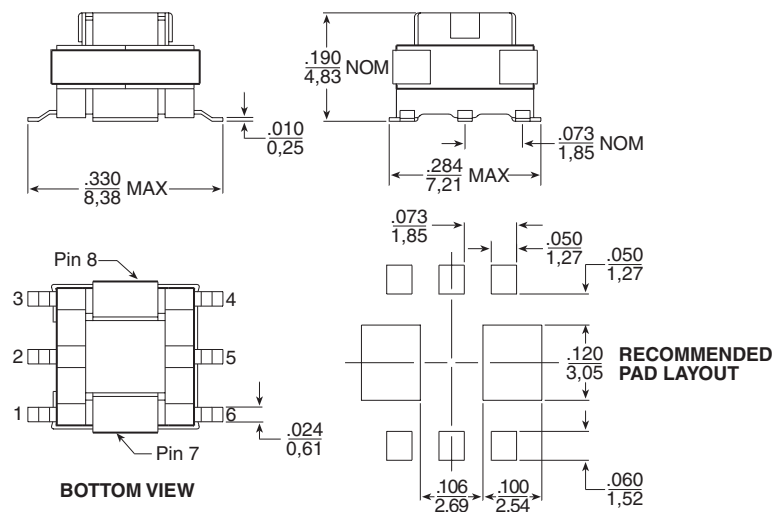
NOTES:

- 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 (Rt) 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: $B_{pk} = 37.59 * V_{ref} * (Duty_Cycle_Max) * 10^5 / (N * Freq_kHz)$
- * for bi-polar current applications divide Bpk as calculated above by 2.
- Add "T" suffix to the part number for Tape & Reel packaging, (i.e. P8222T).

Mechanical

Schematic



APPLICATION CIRCUIT

Weight 0.34 grams
 Tray 120/tray
 Tape & Reel 900/reel
 Coplanarity 0.006 inches

Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

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