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

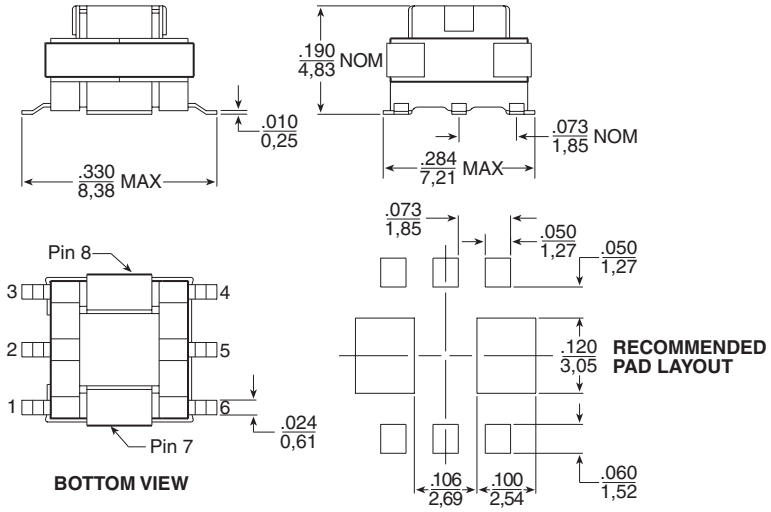
Part Number	Turns Ratio	Current Rating [2] (A)	Secondary Inductance (mH MIN)	DCR (mΩ MAX)		Hipot (V_{RMS})
				Primary (8-7)	Secondary (6-4)	
P8222	1:20	10	0.08	6	550	500
P8223	1:30	10	0.18	6	870	500
P8224	1:40	10	0.32	6	1140	500
P8225	1:50	10	0.50	6	1500	500
P8226	1:60	10	0.72	6	1750	500
P8227	1:70	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:

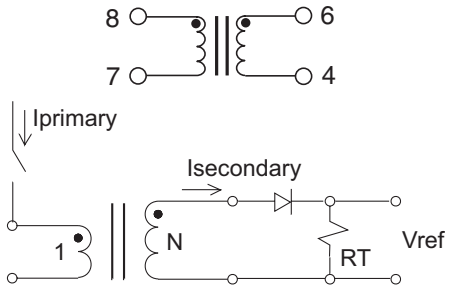
1. The temperature of the component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with 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 (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 uni-polar current use following formula: Bpk = 37.59 * Vref * (Duty_Cycle_Max) * 10^5 / (N * Freq_kHz)

   * for bi-polar current applications divide Bpk as calculated above by 2.
5. Add "**T**" suffix to the part number for Tape & Reel packaging, (i.e. P8222**T**).

Mechanical



Schematic



APPLICATION CIRCUIT

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

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

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