SMT CURRENT SENSE TRANSFORMERS

Ruggedized

PL325X



Height: 5.5mm Max

Footprint: 8.4mm x 7.2mm Max Currency Rating: Up to 10A

Frequency Range: 50kHz to 1MHz

Surface Mount Package: Pick and Place Compatible

Varnished Windings

Operating Temperature: -55°C to +130°CStorage Temperature: -55°C to +130°C

Isolation Voltage: 500 Vrms Max

Moisture Sensitivity Level: 1

Solder Reflow Processing: 235°C Peak Temperature, $\Delta T < 3$ °C/sec

Lead Finish: Hot Solder Dipped - Sn63%/Pb37%

Meets Environmental Requirements: MIL-PRF-27F Grade 5 Class

Space Grade versions that meet workmanship LAW MIL-STD-981 are available upon special request.

Electrical Specifications @ 25° C — Operating Temperature - 55° C to + 130° C						
P _{art} 5,6 Number	Tums Ratio	Current 2 Rating (A)	Secondary Inductance (mH MIN)	DCR (m\Omega MAX)		Hipot
				Primary (8-7)	Secondary (1-3)	(VRMS)
PL3250	1:20	10	0.08	6	550	500
PL3251	1:30	10	0.18	6	870	500
PL3252	1:40	10	0.32	6	1140	500
PL3253	1:50	10	0.50	6	1500	500
PL3254	1:60	10	0.72	6	2250	500
PL3255	1:70	10	0.98	6	4750	500
PL3256	1:100	10	2.00	6	5500	500
PL3257	1:125	10	3.00	6	6500	500

NOTES:

- 1. The temperature of the component (ambient temperature plus temper-ature 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 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 (W) = $VREF * N / (Ipeak_primary)$
- 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 = $14.29 \times VREF \times (Duty_Cycle_Max) \times 10^8 / (N \times Freq_kHz)$
- * for bi-polar current applications divide BPK as calculated above by 2.
- 5. For RoHS compliant parts add suffix NL to the part number.
- 6. Add T suffix to the part number for tape and reel packaging.



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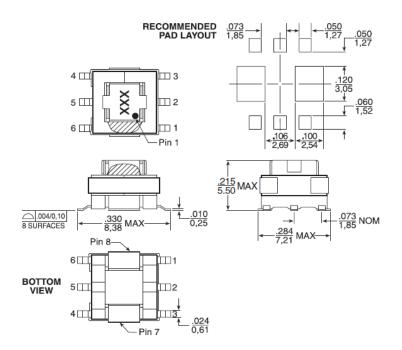
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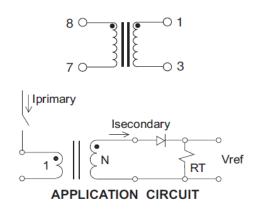
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Mechanical Schematic

PL325X





Welght 0.34 grams Tape & Reel 900/reel Coplanarity 0.004 inches

Dimensions: Inches mm

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

