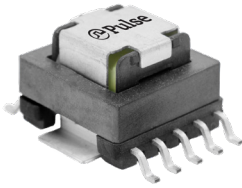


SMT Current Sense Transformer

PB002XNL Series



- Height:** 10mm Max
- Footprint:** 19.9mm x 14.5mm Max
- Frequency Range:** 20kHz to 500kHz
- Current Rating:** up to 35A

Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

Part Number	Turns Ratio	Secondary Inductance (mH MIN)	DCR (mΩ MAX)		Hipot (V _{RMS})
			Primary (11-12)	Secondary (2-4)	
PB0025NL	50:1	1.4	0.42	700	500
PB0026NL	100:1	5.6	0.42	1400	500
PB0027NL	200:1	22.4	0.42	2900	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.
 - 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:

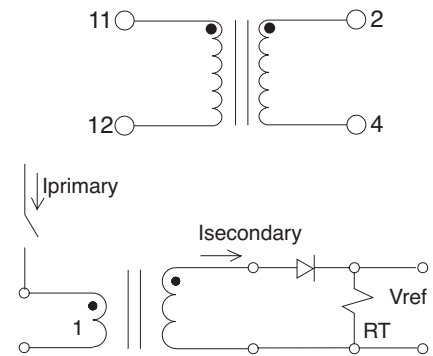
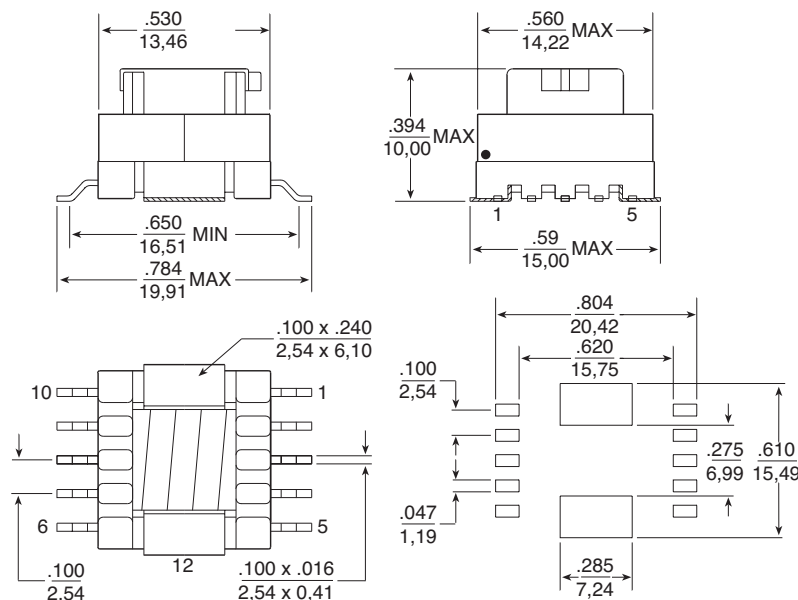
$$B_{PK} = 64.9 * V_{REF} * (Duty_Cycle_Max) * 10^5 / (N * Freq_kHz)$$

* for bi-polar current applications divide B_{PK} (as calculated above) by 2.
 - Optional Tape & Packaging can be ordered by adding a "T" suffix to the part number (i.e. PA0368.050NL becomes PA0368.050NLT). Pulse complies to the industry standard tape and reel specification EIA481.
 - 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

PBXXXXNL



APPLICATION CIRCUIT

- Weight**4.7 grams
- Tray**100/tray
- Tape & Reel**300/reel
- Coplanarity**0.006 inches

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

Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

SMT Current Sense Transformer

PB002XNL Series



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