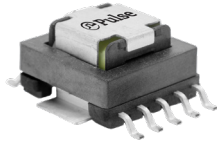


# SMT Power SENSE Transformers

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 <sub>DC</sub> )
			Primary (11-12)	Secondary (2-4)	
PB0025NL	50:1	1.4	0.42	700	1000
PB0026NL	100:1	5.6	0.42	1400	1000
PB0027NL	200:1	22.4	0.42	2900	1000

### 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:  

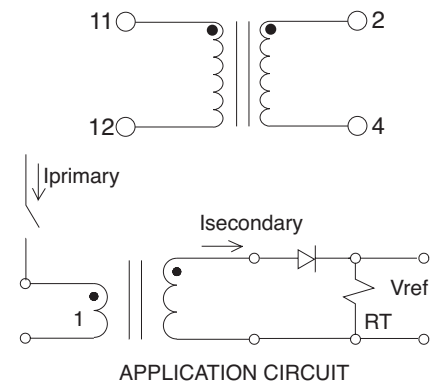
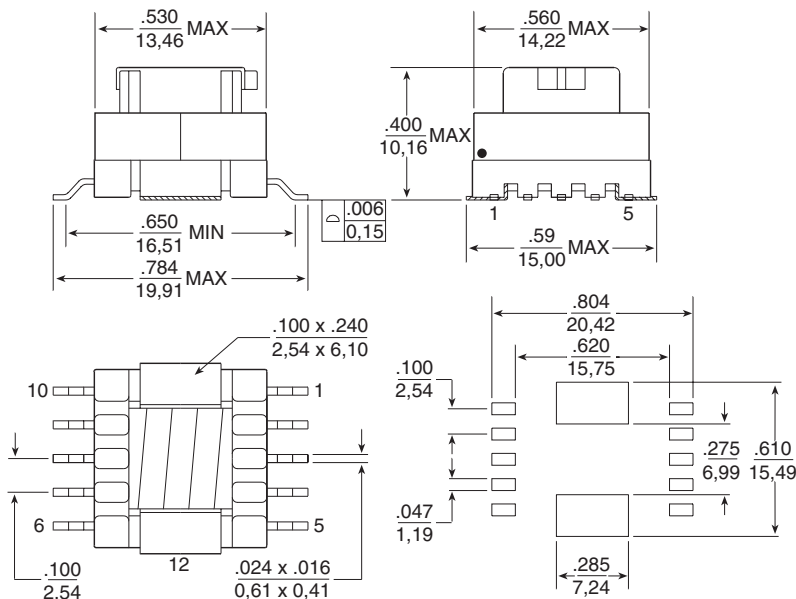
$$R_t (\Omega) = V_{REF} * N / (I_{peak\_primary})$$
- The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for uni-polar current use following formula:  

$$BPK = 64.9 * V_{REF} * (Duty\_Cycle\_Max) * 105 / (N * Freq\_kHz)$$
- \* for bi-polar current applications divide BPK (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

### PB002XNL

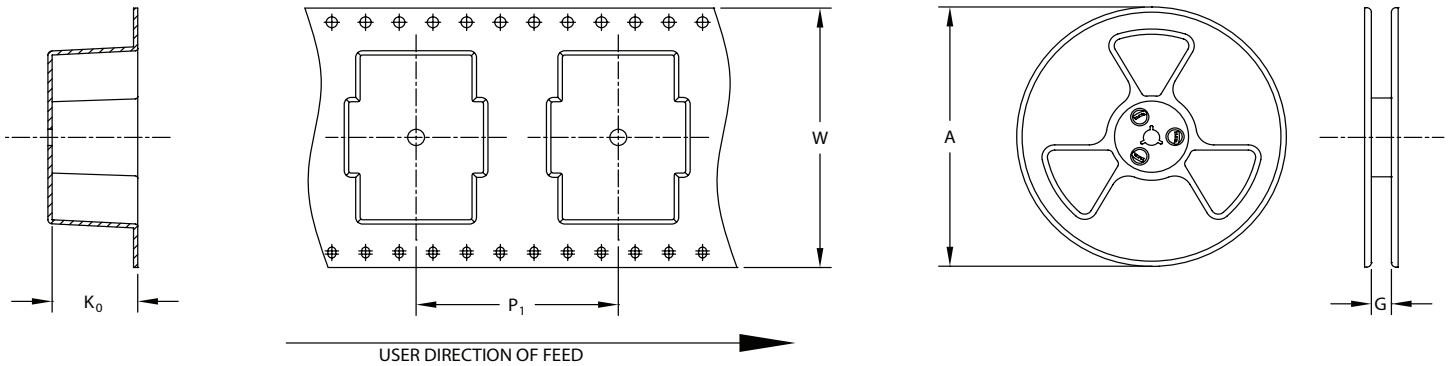


**Weight** .....4.7grams  
**Tape & Reel** .....200/reel  
**Tray** .....70/tray  
**Dimensions:**  $\frac{\text{Inches}}{\text{mm}}$   
 Unless otherwise specified,  
 all tolerances are:  $\pm \frac{010}{0,25}$

# SMT Power SENSE Transformers

PB002XNL Series

## TAPE & REEL INFO



### SURFACE MOUNTING TYPE, REEL/TAPE LIST

PART NUMBER	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P <sub>1</sub>	W	K <sub>0</sub>	PCS/REEL
PB002XNLT	Ø330	32.4	24	32	10.16	200

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