

P820X Series



- 🌀 **Height:** 5.5mm Max
- 🌀 **Footprint:** 8.4mm x 7.2mm Max
- 🌀 **Current Rating:** up to 10A
- 🌀 **Frequency Range:** 20kHz to 1MHz
- 🌀 Lower Primary DCR version available: PA1005.XXX series

Part ^{6,7} Number	Turns Ratio	Current ² Rating (A)	Secondary Inductance (mH MIN)	DCR (mΩ MAX)		Hipot (V _{RMS})
				Primary (8-7)	Secondary (1-3)	
P8202NL	1:20	10	0.08	6	550	500
P8203NL	1:30	10	0.18	6	870	500
P8204NL	1:40	10	0.32	6	1140	500
P8205NL	1:50	10	0.50	6	1500	500
P8206NL	1:60	10	0.72	6	2250	500
P8207NL	1:70	10	0.98	6	4700	500
P8208NL	1:100	10	2.00	6	6000	500
P8209NL	1:125	10	3.00	6	6500	500

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 40C with no airflow.
3. To calculate the value of the terminating resistor (Rt) use the following formula:

$$R_t (\Omega) = V_{ref} * N / (I_{peak_primary})$$
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:

* for bi-polar current applications divide B_{PK} (as calculated above) by 2.

5. Part number **P8222** to **P8229** are reverse polarity versions of **P820X**.
6. Optional Tape & Reel packaging can be ordered by adding a **"T"** suffix to the part number (i.e. P8202NL becomes P8202NL**T**). Pulse complies to industry standard tape and reel specification EIA481.
7. 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.

Schematic

XLN

RECOMMENDED PAD LAYOUT

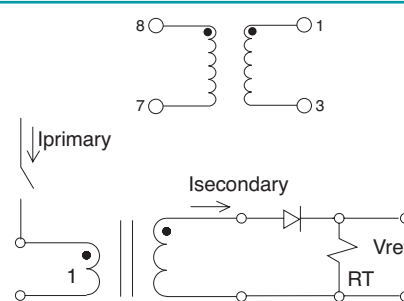
Top view of the connector showing pins 1 through 6. Pin 1 is indicated with a dot and label. The top surface has a texture labeled 'XXX'.

Bottom view of the connector showing pins 1 through 6. Pin 7 is indicated with a dot and label. The bottom surface has a texture labeled 'YYY'.

Recommended Pad Layout diagram showing dimensions in inches and millimeters:

- Pin 1: .073 1,85
- Pin 2: .050 1,27
- Pin 3: .050 1,27
- Pin 4: .120 3,05
- Pin 5: .060 1,52
- Pin 6: .106 2,69
- Pin 7: .100 2,54
- Pin 8: .215 5,50 MAX
- Pin 9: .073 1,85 NOM
- Pin 10: .284 7,21 MAX
- Pin 11: .024 0,61
- Pin 12: .024 0,61

Surface finish specification: .004/0,10 8 SURFACES



APPLICATION CIRCUIT

Weight0.34 grams
Tray120/tray
Tape & Reel900/reel
Coplanarity0.004 inches

Dimension: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{.25}$

SMT Current Sense Transformer

P820X Series

For More Information:

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