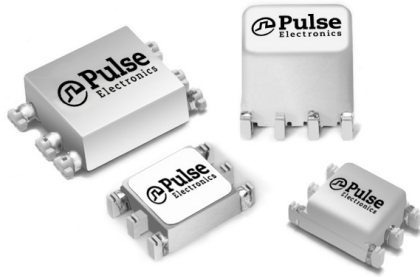


SMT Gate Drive Transformers

PA200xNL Basic and Operational Insulation



- Higher Volt-μsec capability
- Basic insulation (1.4mm creepage/clearance) and operational available
- Operating frequency: 50kHz and up

Electrical Specifications @ 25°C - Operating Temperature -40°C to 130°C⁵

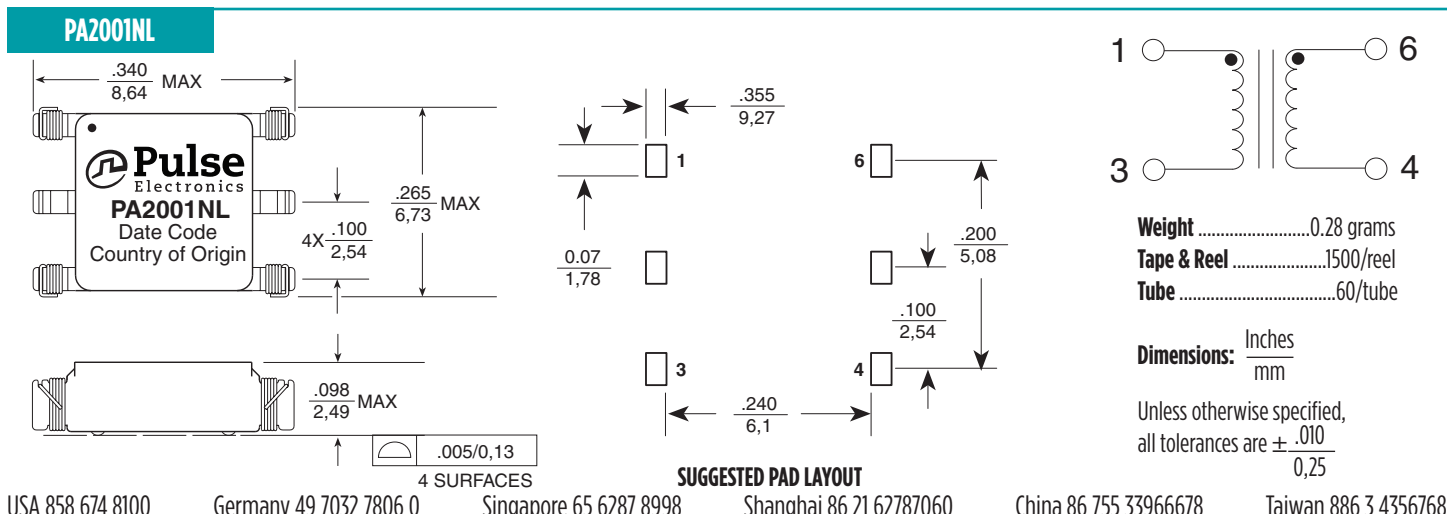
Part ^{1,2} Number	Turns Ratio	Pri-Sec Insulation (VRMS)	MAX ¹ V*μsec	Primary Inductance (μH MIN)	Leakage Inductance (μH MAX)	DCR Primary (Ω MAX)	DCR Secondary (Ω MAX)	Package Size (L x W x H) (mm MAX)
OPERATIONAL INSULATION								
PA2001NL	1:1	1500	12	403	0.46	0.60	0.60	8.6 x 6.7 x 2.5
PA2002NL	1:1:1	1500	60	1800	0.60	1.60	1.60	9.0 x 8.6 x 7.6
PA2004NL	1:1:1	1500	16	437	0.85	0.85	0.85	8.6 x 6.7 x 3.6
BASIC INSULATION (1.4MM CREEPAGE AND CLEARANCE BETWEEN PRIMARY AND SECONDARY)								
PA2005NL	1:1:1	1500	28	840	0.75	1.05	1.05	11.8 x 8.8 x 4.0
PA2006NL	1:1	1500	28	864	0.75	0.82	0.82	11.8 x 8.8 x 4.0
PA2007NL	1:1	1500	55.5	1490	0.80	1.15	1.15	9.0 x 8.6 x 7.6
PA2008NL	2:1:1	1500	55.5	1425	0.80	1.15	0.575	9.0 x 8.6 x 7.6
PA2009NL	2.5:1:1	1500	55.5	1486	0.80	1.15	0.425	9.0 x 8.6 x 7.6

Notes:

- The maximum volt-μsec limits the peak flux density to 2200 Gauss when used in a unipolar drive application. For bi-polar drive applications, a maximum volt-μsec of two times this rating is acceptable (i.e. 2* (volt*μsec rating) Volt*μsec = (voltage applied to the primary) * dutycycle / Frequency = V * alpha / Freq_Hz = V * μsec
- Leakage inductance is measured at primary terminals with all secondaries shorted.
- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PA2002NL becomes PA2002NLT). Pulse complies to industry standard tape and reel specification EIA481.
- The "NL" suffix indicates an RoHS-compliant part number.
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

Mechanical

Schematic



SMT Gate Drive Transformers

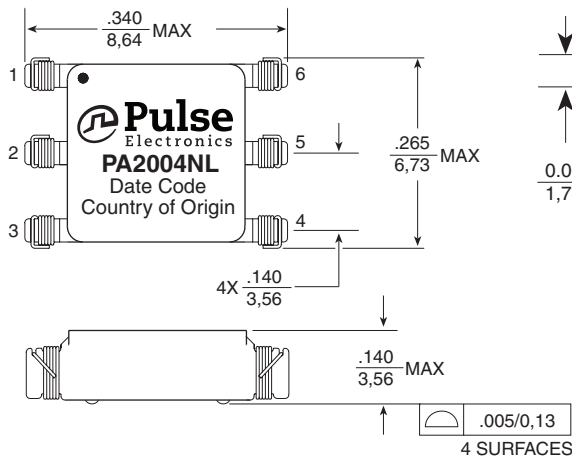
PA200xNL Basic and Operational Insulation



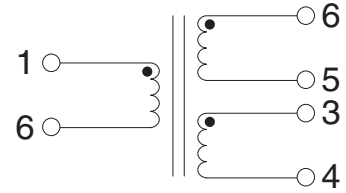
Mechanicals (CONTINUED)

Schematics

PA2004NL



SUGGESTED PAD LAYOUT

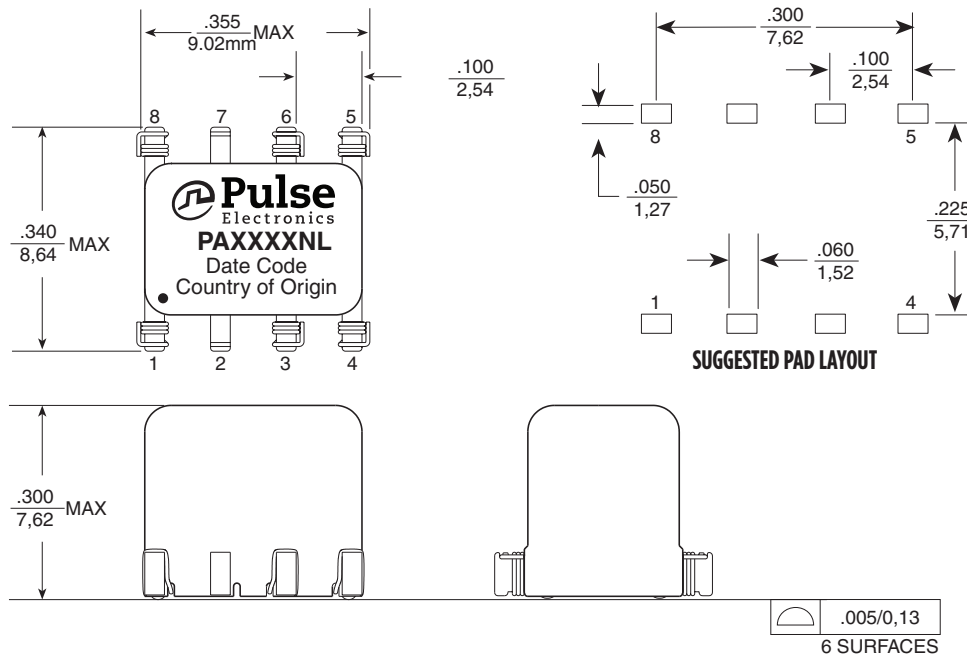


Weight0.23 grams
Tape & Reel800/reel
Tube75/tube

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

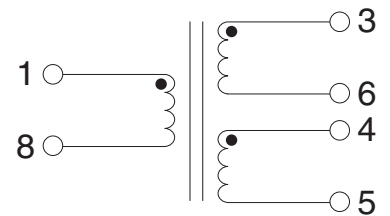
Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0,25}$

PA2002NL, PA2007NL, PA2008NL, PA2009NL

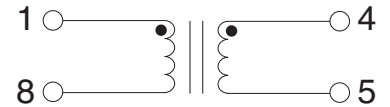


SUGGESTED PAD LAYOUT

PA2002NL / PA2008NL / PA2009NL



PA2007NL



Weight0.60 grams
Tape & Reel400/reel
Tube50/tube

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

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

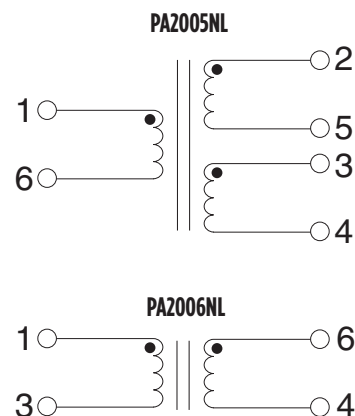
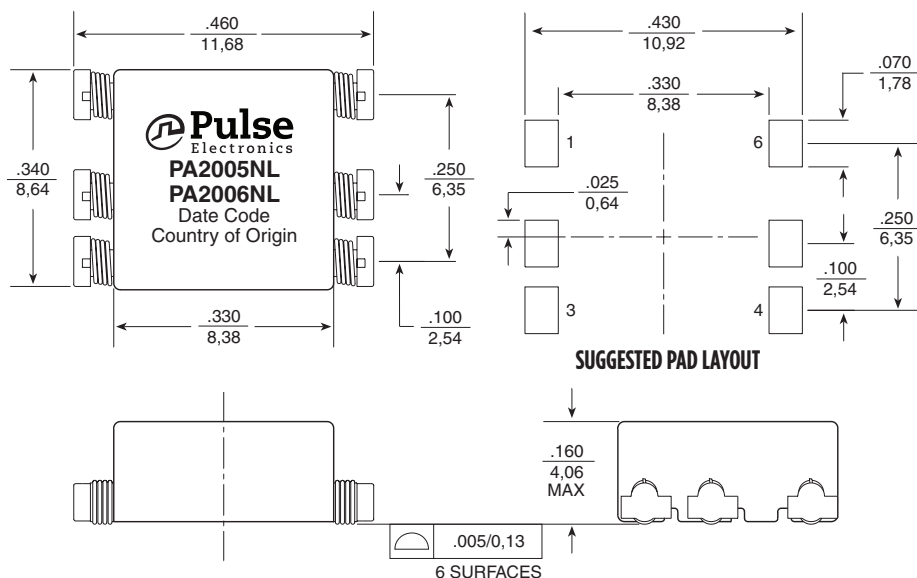
SMT Gate Drive Transformers

PA200xNL Basic and Operational Insulation

Mechanical (CONTINUED)

Schematic

PA2005NL, PA2006NL



Weight0.48 grams
Tape & Reel900/reel
Tube60/tube

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

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

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