

HIGH ISOLATION GATE DRIVE TRANSFORMER

Ruggedized



PL3212NL

- ⚙ Rugged design for industrial application
- ⚙ Operating Frequency: 50kHz to 300kHz
- ⚙ Lead Finish: Pure Tin

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

Part Number	Turns Ratio 100kHz 0.1Vrms (±2%)	ET (V * μsec MAX)	Primary Inductance 100kHz 0.1Vrms (μH MIN)	Leakage Inductance Gate to Drive 100kHz 0.02A (μH MAX)	DCR Drive (1-10)	DCR Gates	"Hi-Pot 60Hz 60s (Vrms)"	
			(1-10)	(1-10) other pins shorts	(mΩ ±20%)	(mΩ ±20%)	Drive-Gate	Gate-Gate
PL3212NL	1:1:1	95	450	0.5	80	72	3000	1500

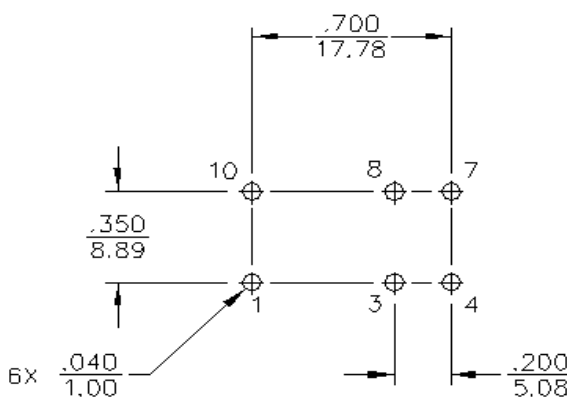
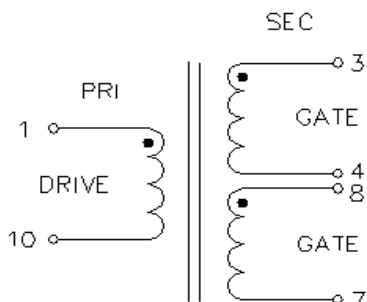
Notes: 1. Inductance and leakage inductance are measured with Agilent 4284A or equivalent.

2. Turns ratio is measured with Wayne Kerr 3260B or equivalent.
3. DCR is measured with Valhalla Scientific 4150ATC or equivalent.
4. Hi-Pot is performed with Kikusui TOS5051 or equivalent.
5. The peak flux density should remain below 2100 Gauss to ensure that the core does not saturate. Use the following procedure to calculate the peak flux density:
 - A. Calculate the Volt-μsec product (ET):
 $ET = 10 * (\text{Drive Voltage}) * (\text{Dton}) / (\text{Frequency in kHz})$
 - B. Calculate the operating flux density (B): $BPK (\text{Gauss}) = X * ET / Ff$ where:
 $Ff = 1$ for unipolar drive applications and 2 for bipolar drive applications,

Electrical Schematic

Suggested Land Pattern

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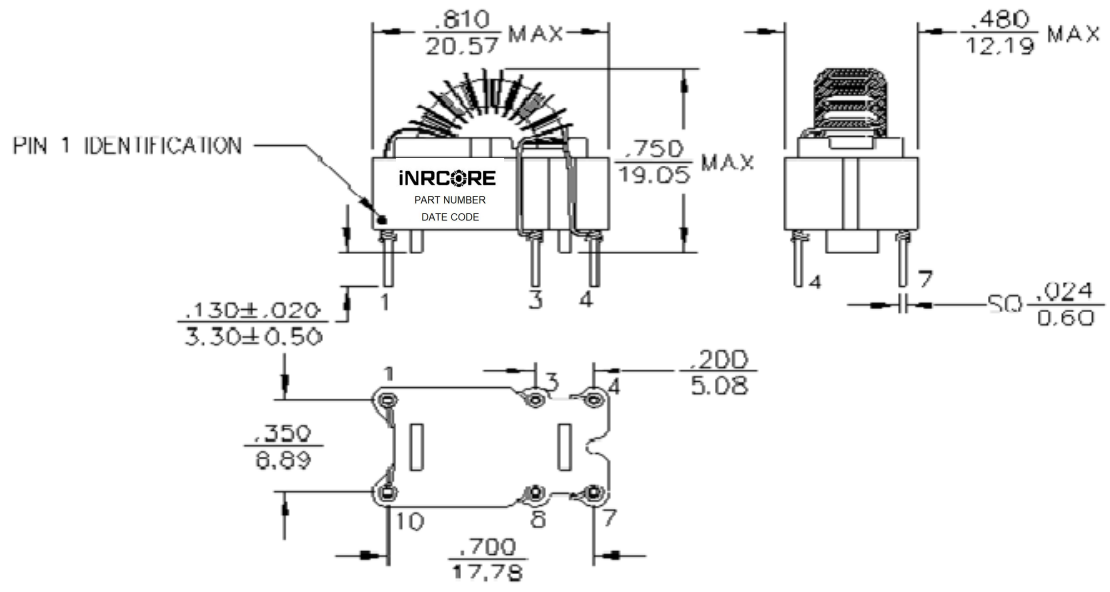
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Mechanical

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Dimensions: inches/mm
 Unless otherwise specified, all tolerances are $\pm 0.010/0.25$
 Weight.....Approx 5.0grams
 Tray.....80pcs/tray

For More Information

iNRCORE, LLC
 311 Sinclair Road Bristol,
 PA 19007-6812 U.S.A
 Tel: + 1.215.781.6400
 Fax: +1.215.7816430

Global Sales Representatives and Locations:
<http://www.incore.com>

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