

GATE DRIVE TRANSFORMER

Ruggedized



- ⚙ Operating and Storage Temperature: -55°C to +130°C
- ⚙ Isolation Voltage: 1500 Vrms between Gate and Drive
- ⚙ Operating Frequency: 50kHz to 600kHz
- ⚙ Lead Finish: Sn100
- ⚙ Moisture Sensitivity Level: 3

Part ³ Number	Turns Ratio	Max ¹ (V*µsec)	Primary Inductance 50kHz 30m Vrms (µH MIN)	Leakage ² Inductance 100kHz 20m Vrms (µH MAX)	DCR Primary (Ω MAX)	DCR Secondary (Ω MAX)	Hi-Pot @60s MIN (Vrms) Pri-Sec
PL3172NL	1:1 ± 2%	27.2	1200	0.50	0.91	0.91	1500

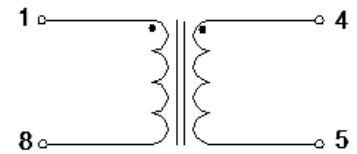
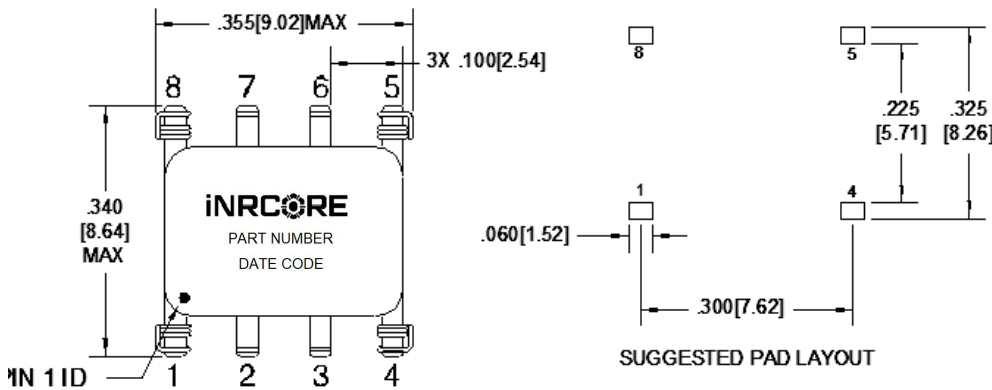
Notes:

1. The Maximum volt-µsec rating limits the peak flux density to 2200 Gauss when used in a unipolar drive application. (ie: (volt*µsec rating) = (voltage applied to the primary) * duty cycle / Frequency.
2. Leakage inductance is measured at primary terminals with all secondaries shorted.
3. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PL3172NL becomes PL3172NLT). PulseR complies to industry standard tape and reel specification EIA481.
4. 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 PulseR for availability.
5. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

Mechanical

Schematic

PL3172NL



SUGGESTED PAD LAYOUT

Dimensions: inches [mm]

Unless otherwise specified,
all tolerances are ± .010 [0.25]

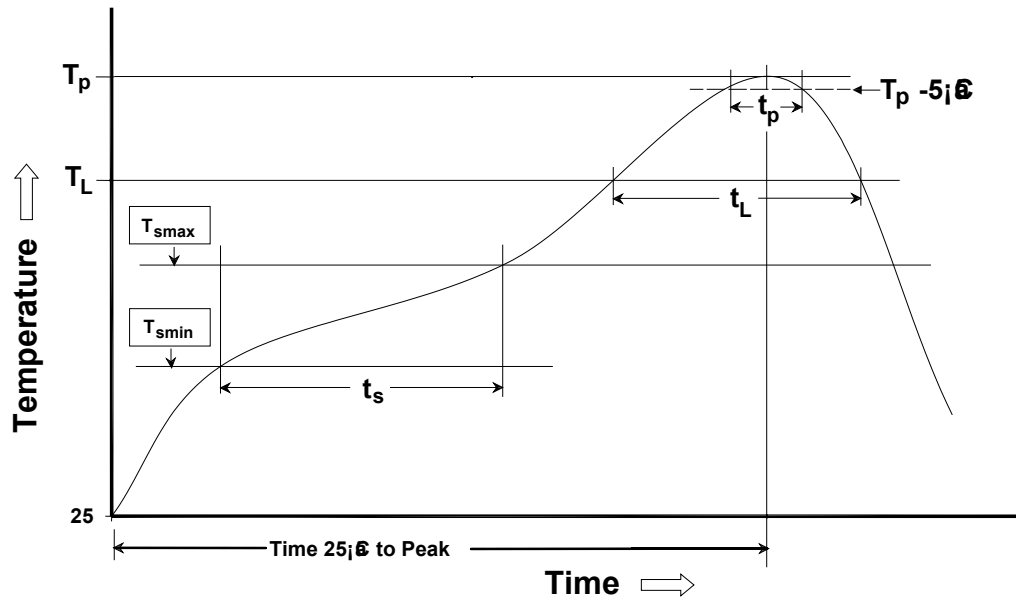
Weight.....0.8grams MAX
Tape and Reel.....400pcs/reel
Tube.....50pcs/tube

.005/0.13

6 SURFACES



No Lead Recommended Reflow Profile (Based on J-STD-020D)



T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_p (°C MAX)	t_s (s)	t_L (s)	t_p (s MAX)	Ramp-up rate (T_L to T_p)	Ramp-down rate (T_p to T_L)	Time 25°C to peak temperature (s MAX)
150	200	217	245	60-120	60-150	30	3°C/s MAX	6°C/s MAX	480

Notes:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2.

For More Information

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