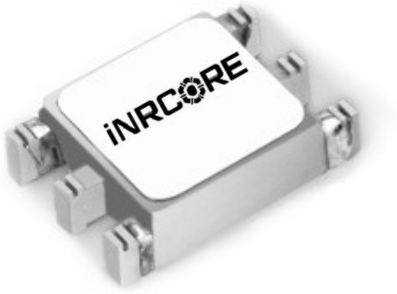
GATE DRIVE TRANSFORMER

Ruggedized

PL3280



- Surface Mount Package - Pick and Place Compatible
- Ambient Operating Temperature: -55°C to +125°C°
- 1.4mm Creapage/Clearance Insulation
- Storage Temperature: -55°C to +125°C
- Epoxy Encapsulated
- Isolation Voltage: 1500 Vrms Maximum
- Moisture Sensitivity Level: 3 (168 hours floor life @ <30°C/60% RH)
- Solder Reflow Processing: 235°C peak temperature, ΔT<3°C/sec
- Lead Finish: Hot Solder Dipped – Sn63%/Pb37%
- Meets Environmental Requirements MIL-PRF-27F Grade 5 Class S
- Operating Frequency: 50kHz and Up

Electrical Specifications 25°C

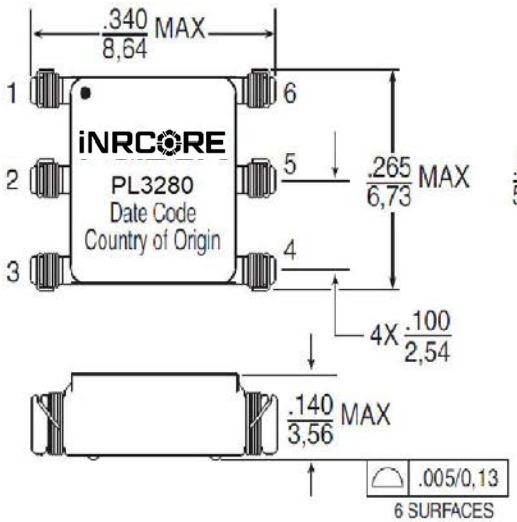
Part [3,4] Number	Turns Ratio	Pri-Sec Insulation	Max[1] (V*µsec)	Primary Inductance (µH MIN)	Leakage [2] Inductance	DCR Primary (Ω MAX)	DCR Secondary (Ω MAX)
PL3280	1:1:1	1000 Vdc	12.7	1140	0.65	0.75	0.75

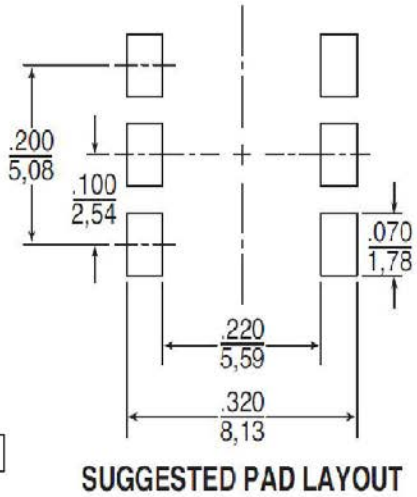
Notes:

1. The maximum volt-µsec rating limits the peak flux density to 2200 Gauss when used in a unipolar drive application. For bi-polar drive applica-tions a maximum volt-µsec of two times this rating is acceptable (ie: 2* (volt*µsec rating) Volt*µsec = (voltage applied to the primary) * dutycycle / Frequecy = V * alpha / Freq_Hz = V * µsec.
2. Leakage inductance is measured at primary terminals with all secondar-ies shorted.
3. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PL3280 becomes PL3280T). Pulse complies to indus-try 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 Pulse for availability.
5. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

Mechanical

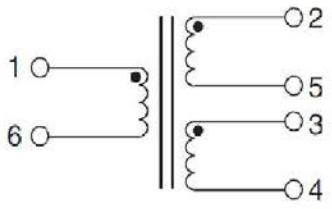
PL3280





SUGGESTED PAD LAYOUT

Schematic

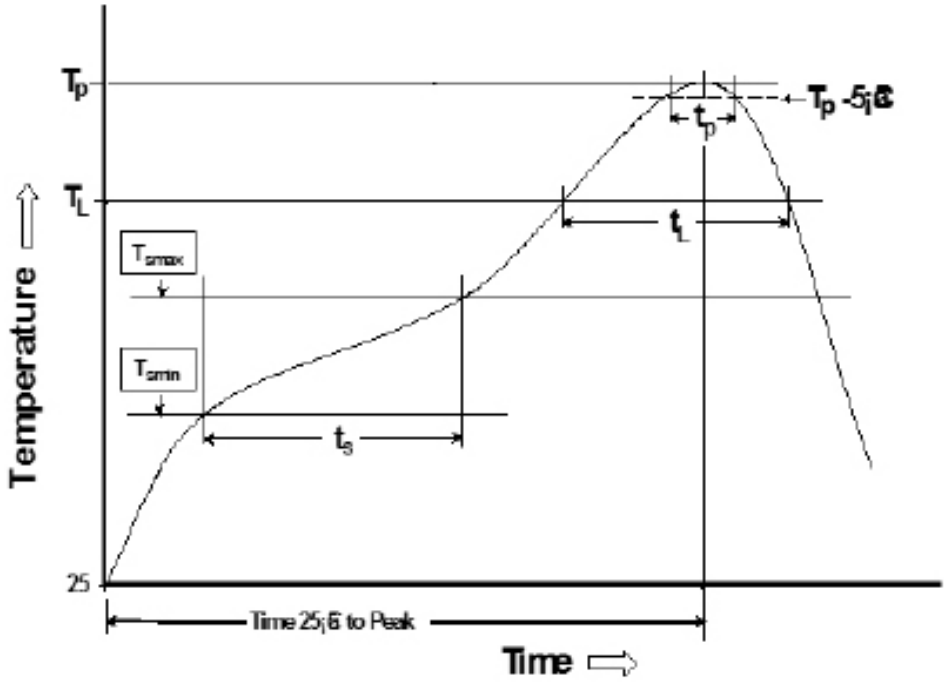


Weight.....0.23 grams
Tape & Reel.....800/reel
Tube.....75/tube

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

Tin/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)
100	150	183	225	60-120	60-150	20	3°C/s MAX	6°C/s MAX	360

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

For More Information

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