

GATE DRIVE TRANSFORMER

Ruggedized



- Surface Mount Package - Pick and Place Compatible
- Ambient Operating Temperature: -55°C to +125°C°
- Storage & Operating Temperature: -55°C to +125°C
- Operating Frequency: 50kHz and Up
- >1500V_{DC} Isolation between Gate and Drive
- Basic Insulation (1.4mm creepage/clearance) and functional available
- Moisture Sensitivity Level: 1

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)
PL3057	1:1	1500 Vdc	27.2	1200	0.50	.91	0.91

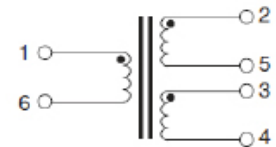
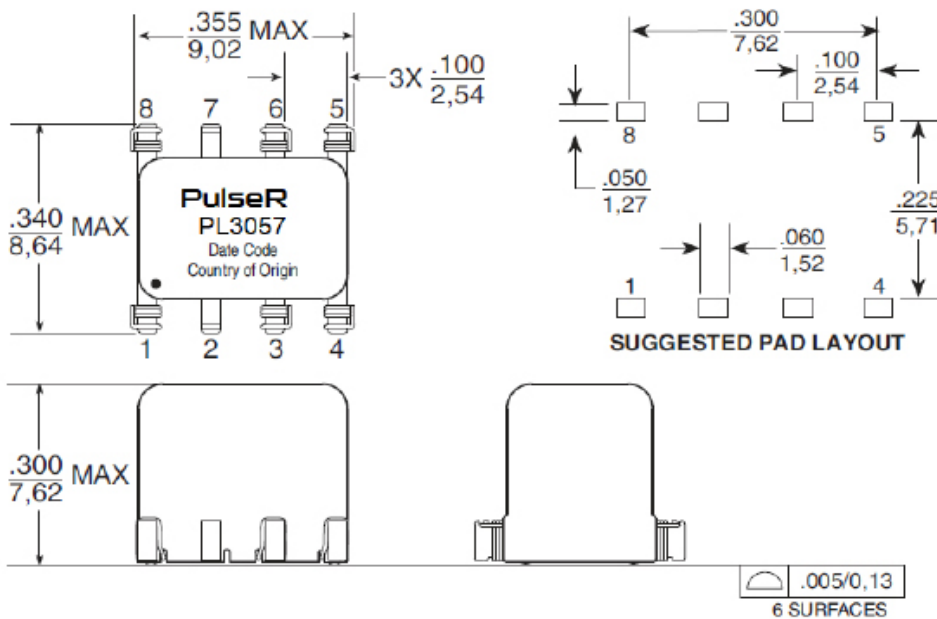
Notes:

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 applications a maximum volt-µsec of two times this rating is acceptable (ie: 2* (volt*µsec rating) Volt*µsec = (voltage applied to the primary) * dutycycle / Frequency = V * alpha / Freq_Hz = V * µsec
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. PL3057 becomes PL3057T). Pulse 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 Pulse for availability.
5. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

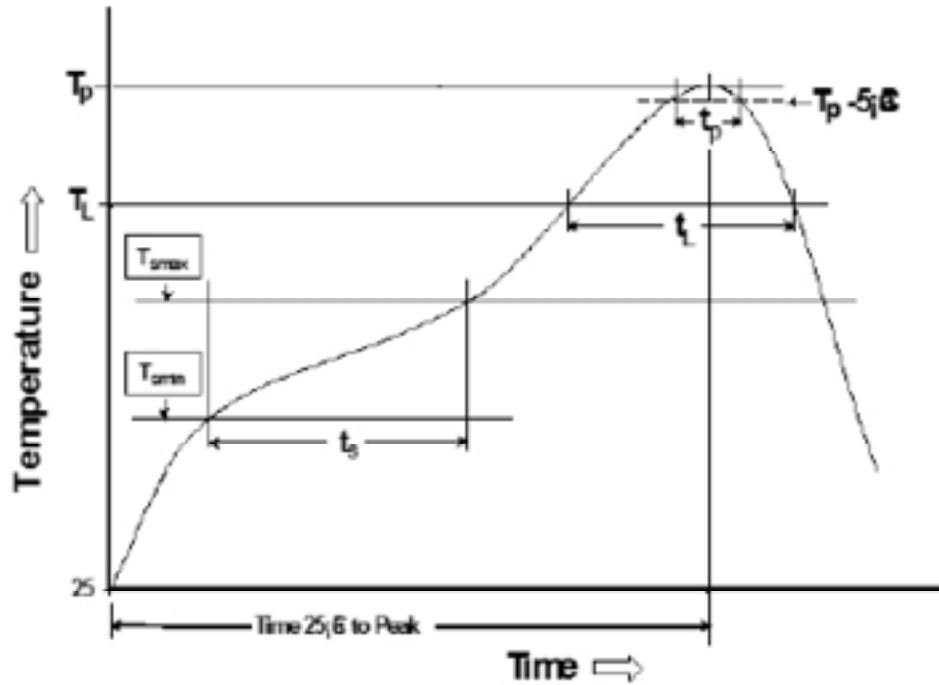
Mechanical

Schematic

PL3057



Tin/Lead Recommended Reflow Profile (Based on J-STD-0200)



T_{BMIN} (°C)	T_{BMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_g (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	235	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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