

# SMT GATE DRIVE TRANSFORMERS

1500VDC Basic and Operational Insulation  
Ruggedized



- 500Vdc isolation between gate and drive
- Basic insulation (1.4mm creepage/clearance) and operational available
- Moisture Sensitivity Level: 1

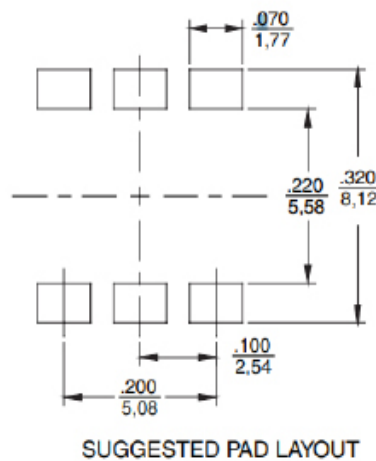
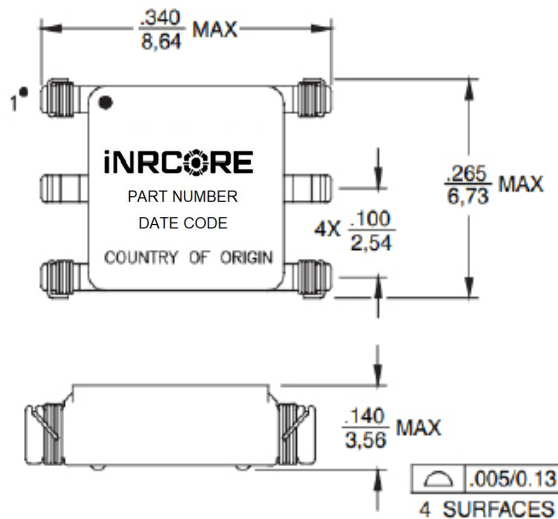
## Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C

Part Number	Turns Ratio	Pri-Sec Insulation (Vdc)	MAX (v* usec)	Primary Inductance (uH MIN)	Leakage Inductance (uH MAX)	DCR Primary (Ω MAX)	DCR Secondary (Ω MAX)	Package Size
PL1960	1:1	1500.00	9.700	785.0	0.46	0.60	0.6	8.6x6.7x2.5

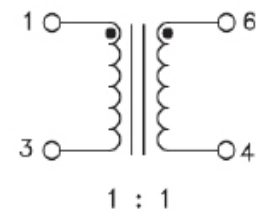
### NOTES:

- 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) \* duty cycle / 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. PL1960 becomes **PL1960T**).
- 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
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

## Mechanical



## Electrical Schematic



Weight .....0.28 grams  
Tape & Reel ..... 1500/reel  
Tube ..... .60/tube

Dimensions: Inches  
mm  
Unless otherwise specified,  
all tolerances are ± .010  
0.25

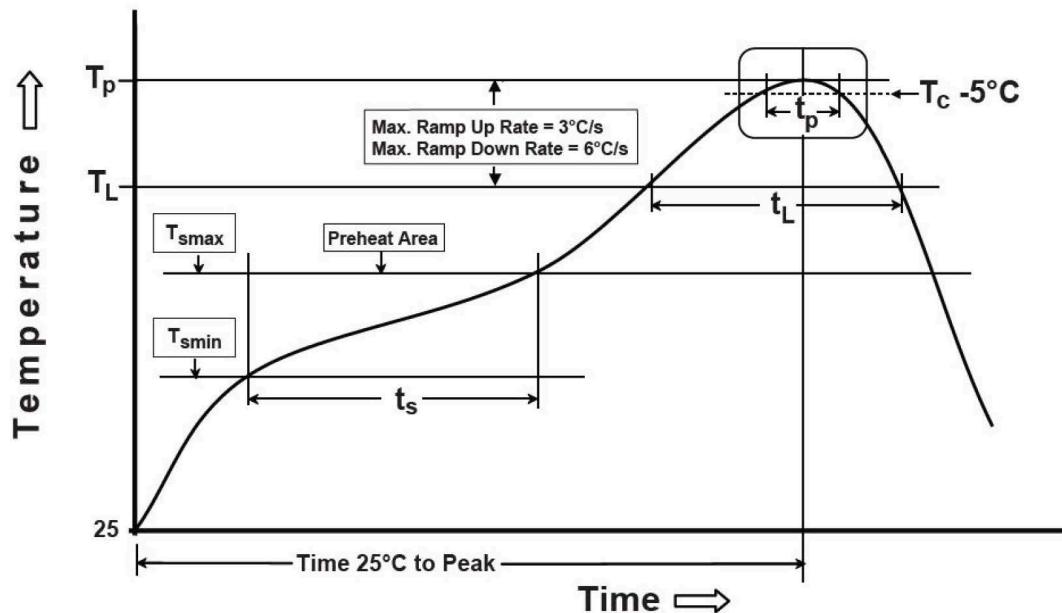


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## Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



$T_{SMIN}$ (°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	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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