

# SMT GATE DRIVE TRANSFORMER

Ruggedized



- R** Operating & Storage Temperature: -55°C to +130°C
- R** RoHS-5 Compliant
- R** Lead Finish: Sn63/Pb37
- R** Max Reflow Temperature: 235°C
- R** Moisture Sensitivity Level: 3

## Electrical Specifications 25°C

Part Number	Turns Ratio (Pri:Sec ±2%)	Pri-Sec Insulation	MAX <sup>2</sup> V*µsec	Primary Inductance (µH MIN)	Leakage Inductance (µH MAX)	DCR Primary (ΩH MAX)	DCR Secondary (ΩH MAX)
PL2243	2.5:1:1	1500Vrms	47	1486	0.80	1.15	0.425

Note: 1.) Add suffix "T" indicates Tape and Reel Packing (i.e. PL2243 becomes PL2243T)

2.) The maximum volt-µsec limits the peak flux density to 2800 Gauss when used in a unipolar drive application.

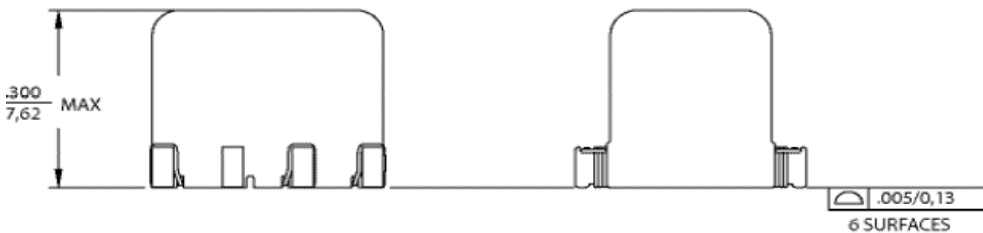
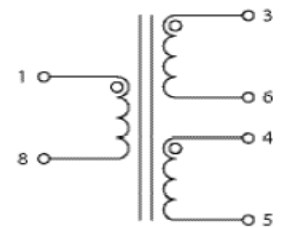
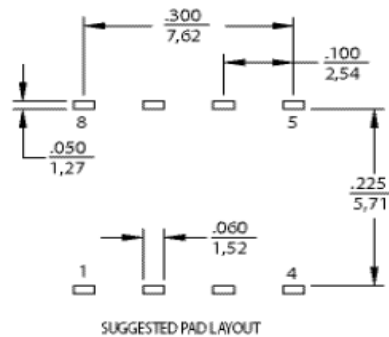
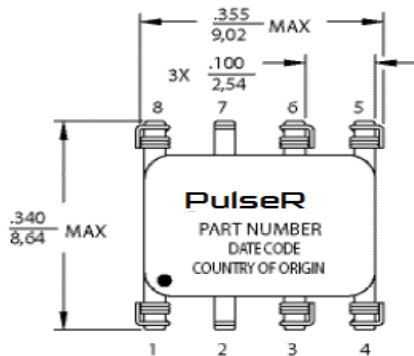
For bi-polar drive applications, a maximum volt-µsec of two times this rating is acceptable (i.e. 2\*(volt\*µsec rating)

$Volt * \mu sec = (voltage \text{ applied to the primary}) * duty cycle / Frequency = V * \alpha / Freq\_Hz = V * \mu sec$

## Mechanical

## Schematic

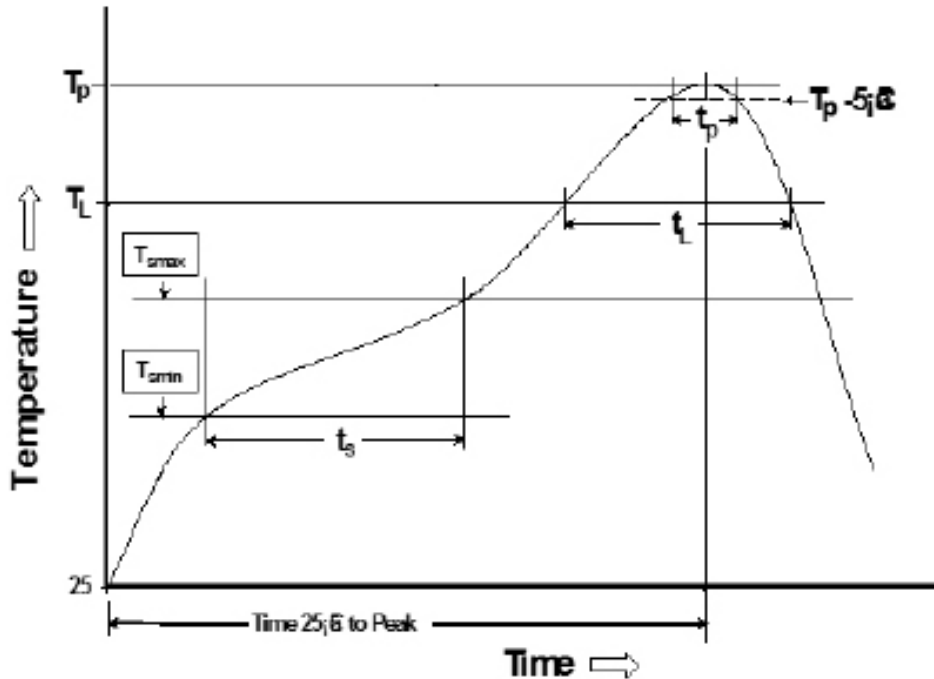
### PL2243



Weight ..... 1.20 grams  
 Tube ..... 40/tube  
 Tape & Reel ..... 600/reel

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	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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