

# SMD Gate Drive Transformer

2700 Vdc Functional Insulation



- ⚙️ 2700VDC insulation between Gate and Drive
- ⚙️ Operating frequency: 50KHz and up
- ⚙️ Footprint size: 8.25\*6.9\*3.0 mm Max
- ⚙️ Three windings (one drive and two gates)

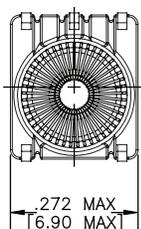
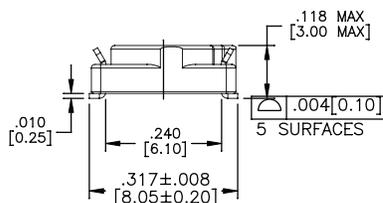
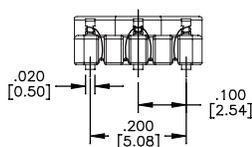
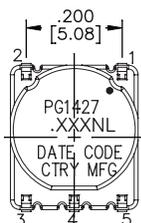
## Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

Part Number <sup>3</sup>	Turns Ratio	Pri-Sec Insulation (VDC)	Max Volt-usec (1-2)	Primary Inductance <sup>2</sup> (μH +/-35%)	Leakage Inductance <sup>2</sup> (μH MAX)	DCR (1-2) (Ω MAX)	DCR (3-4) (Ω MAX)	DCR (4-5) (Ω MAX)
PG1427.001NL	1:1:1	2700	21.0	780.0	0.4	0.85	0.85	0.85
PG1427.002NL	1:1:1	1500	21.0	780.0	0.4	0.85	0.85	0.85
PG1427.003NL	2:1:1	2300	30.0	1600.0	1.5	1.10	0.65	0.65
PG1427.004NL	1.43:1:1	2300	21.0	820.0	2.0	0.80	0.65	0.65

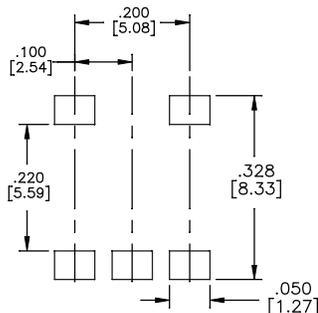
## Mechanical

## Schematic

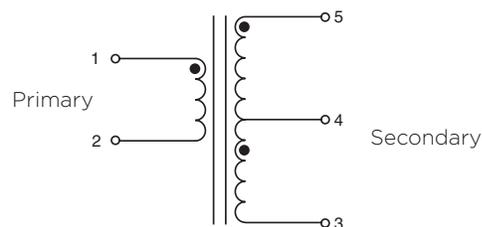
### PG1427.XXXNL



FINAL OUTLINE



SUGGESTED LAND PATTERN



Weight ..... 0.25 grams  
 Tube ..... 75/tube  
 Tape & Reel ..... 1000/reel

Dimensions: Inches  
 mm

Unless otherwise specified,  
 all tolerances are ±.005  
 0.13

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

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## Notes

### PG1427.XXXNL

1. The Maximum volt- $\mu$ sec rating limits the peak flux density to 2500 Gauss when used in a unipolar drive application. For bi-polar drive applications, a maximum volt-sec of 1.5 times this rating is acceptable (ie: volt\* $\mu$ sec rating = (voltage applied to the primary) \* dutycycle / Frequency = V \* alpha / Freq\_Hz = V \*  $\mu$ sec)
2. All inductance tests measured at 100kHz, 100mV.  
Leakage inductance measured from (1-2) with 3,4,5 shorted.
3. Optional Tape & Reel packing can be ordered by adding a "T" suffix to the part number(i.e. PG1427.001NL becomes PG1427.001NLT), Pulse complies to industry standard tape and reel specification EIA481.
4. The temperature of the component (ambient plus thmperature rise) must be within the stated operating temperature range.

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