

# 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)

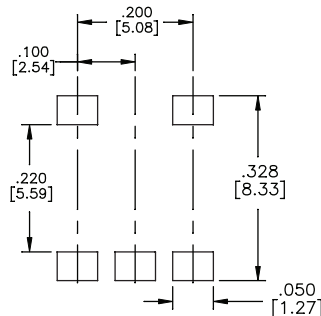
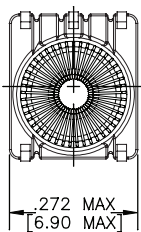
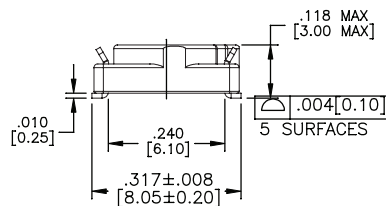
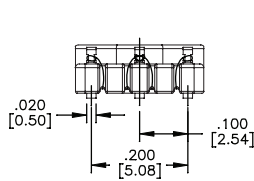
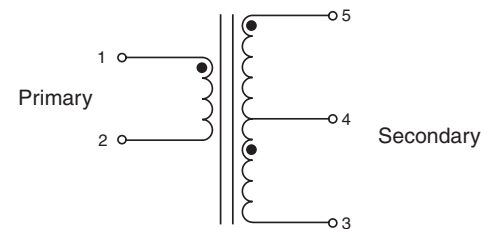
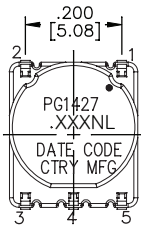
## Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

| 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) \* duty cycle / Frequency =  $V \cdot \alpha / \text{Freq\_Hz} = V \cdot \mu\text{sec}$
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 temperature rise) must be within the stated operating temperature range.

## For More Information

### Pulse Worldwide Headquarters

12220 World Trade Drive  
San Diego, CA 92128  
U.S.A.

Tel: 858 674 8100  
Fax: 858 674 8262

### Pulse Europe

Zeppelinstrasse 15  
71083 Herrenberg  
Germany

Tel: 49 7032 7806 0  
Fax: 49 7032 7806 12

### Pulse China Headquarters

B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Road  
High-Tech Zone  
Nanshan District  
Shenzhen, PR China 518057  
Tel: 86 755 33966678  
Fax: 86 755 33966700

### Pulse North China

Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Road West  
Shanghai 200336  
China

Tel: 86 21 62787060  
Fax: 86 2162786973

### Pulse South Asia

135 Joo Seng Road  
#03-02  
PM Industrial Bldg.  
Singapore 368363

Tel: 65 6287 8998  
Fax: 65 6287 8998

### Pulse North Asia

3F, No. 198  
Zhongyuan Road  
Zhongli City  
Taoyuan County 320  
Taiwan R. O. C.  
Tel: 886 3 4356768  
Fax: 886 3 4356823 (Pulse)  
Fax: 886 3 4356820 (FRE)

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