

SMT GATE DRIVE TRANSFORMERS

1500VDC Basic and Operational Insulation.

Ruggedized



- ⊕ Storage Temperature: -40°C to +130°C
- ⊕ 500Vdc isolation between gate and drive.
- ⊕ Basic insulation(1.4mm creepage/clearance) and operational available.
- ⊕ Maximum Reflow Temperature: 235°C (245°C for RoHS compliant)
- ⊕ Moisture Sensitivity Level: 1

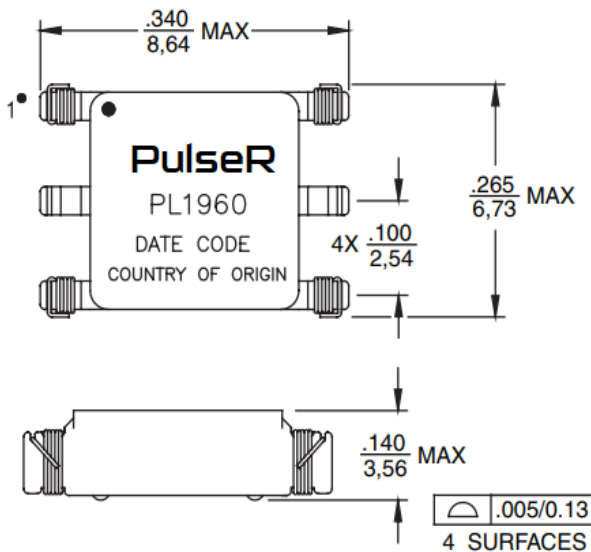
Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C⁵

| 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 |

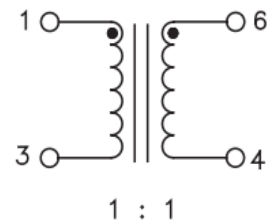
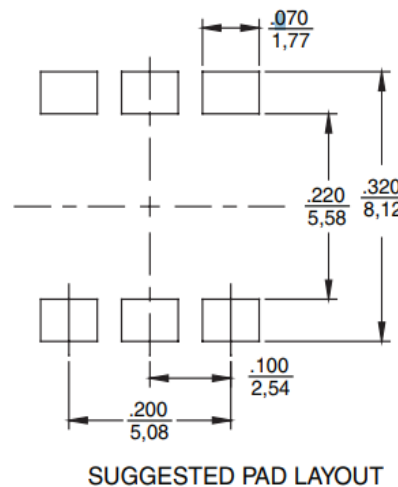
NOTES:

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. PL1960 becomes PL1960T). 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
5. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

Mechanical



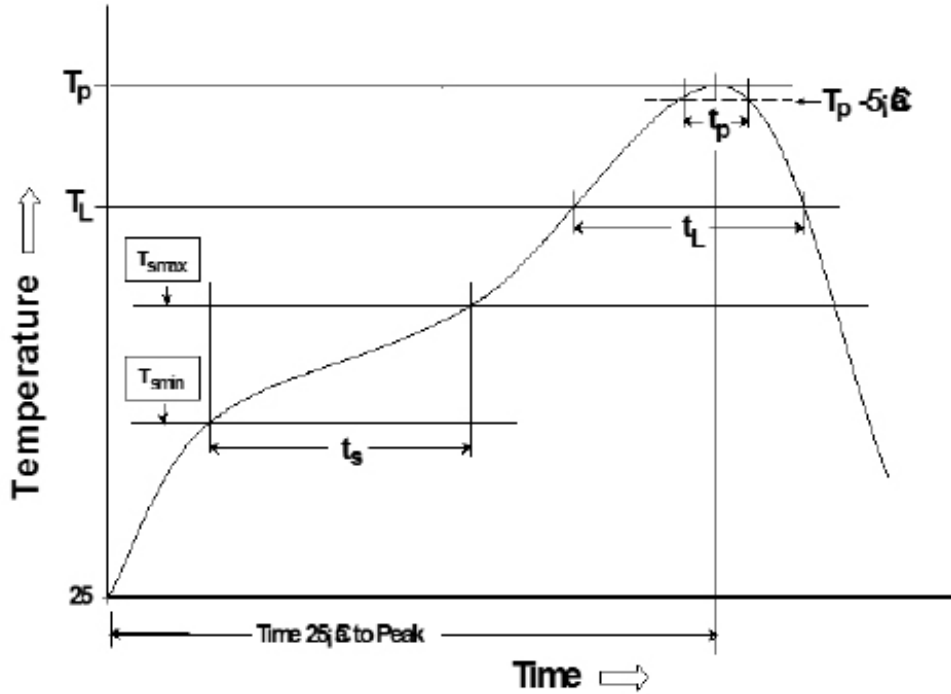
Schematic



Weight0.28 grams
 Tape & Reel 1500/reel
 Tube60/tube

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
 Unless otherwise specified,
 all tolerances are $\pm \frac{.010}{0,25}$

Transceiver 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 | 225 | 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

Pulse North America
 Headquarters
 Two Pearl Buck Court
 Bristol, PA 19007
 U.S.A.

For Global Sales Representatives and Locations Visit:
<http://www.pulseruggedized.com>

Tel: +1.215. 781. 6400
 Fax: +1.215. 781. 6403

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2018. PulseR, LLC. All rights reserved.