# SMT GATE DRIVE TRANSFORMERS





- 1500Vrms (380Vrms continuous)
- Basic Insulation (1.4mm creepage/clearance and operational available)
- Tin/Lead Finish: Sn63/Pb37
- Moisture Sensitivity Level: 3

	Electrical Specifications @ 25 °C – Operating Temperature – 55 °C to +125 °C <sup>5</sup>										
Part Number	Turns Ratio	Pri-Sec Insulation (VRMS)	MAX <sup>1</sup> V* <b>µ</b> sec	Primary Inductance (uH MIN )	Leakage Inductance (µH Max)	DCR Primary $(\Omega \text{ MAX})$	DCR Secondary (Ω MAX)	Package Size (LxWxH) (mm MAX)			
PL2072	1:1	1500	12	403	0.46	0.60	0.60	8.6 x 6.7 x 2.5			
PL2073	1:1:1	1500	20	437	0.85	0.85	0.85	8.6 x 6.7 x 3.6			

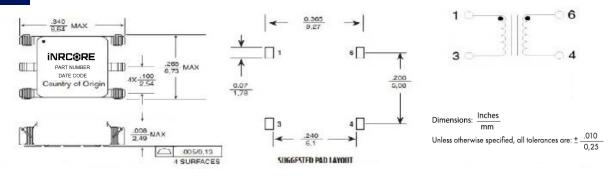
Notes:

- $1. \ The \ maximum \ volt\textbf{-} \mu sec \ limits \ the \ peak \ flux \ density \ to \ 2800 \ Gauss \ when \ used \ in \ a \ unipolar \ drive \ application.$ 
  - For bi-polar drive applications, a maximum volt-use c of two times this rating is acceptable:-
  - (i.e. 2\* (volt\* usec rating) Volt\*usec = (voltage applied to the primary) \* dutycycle / Frequency = V\* alpha/ Freq\_Hz = V\*usec.
- 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. PL2072 becomes **PL2072T**).
- 4. Add suffix "NL" for RoHS compliant part: i.e. PL2072 and PL2073 becomes PL2072NL and PL2073NL.
- 5. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- Continuous isolation voltage confirmed by 125°C/1000hrs accelerated aging with the bias voltage applied between primary and secondary windings.

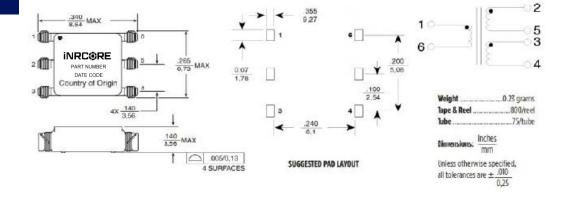
### Mechanical

## **Electrical Schematic**

### PL2072



#### PL2073



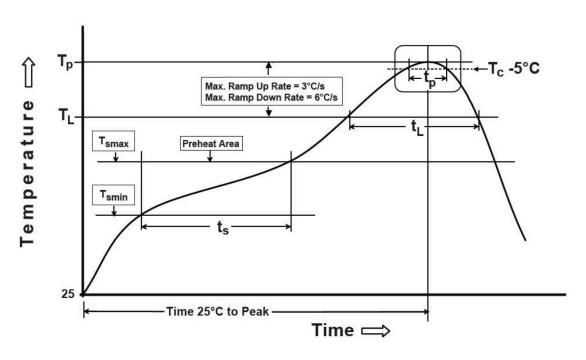


# SMT GATE DRIVE TRANSFORMERS

Ruggedized



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



T <sub>SMIN</sub> (°C)	T <sub>SMAX</sub> (°C)	T <sub>L</sub> (°C)	T <sub>P</sub> (°C MAX)	t <sub>S</sub> (s)	t <sub>L</sub> (s)	t <sub>P</sub> (s MAX)	Ramp-up rate (T <sub>L</sub> to T <sub>P</sub> )	Ramp-down rate $(T_P \text{ to } T_L)$	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**

iNRCORE,LLC 311 Sinclair Road Bristol, PA 19007-6812 U.S.A Tel: + 1.215.781.6400 Fax: +1.215.7816430

# Global Sales Representatives and Locations:

http://www.inrcore.com

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, 2020. iNRCORE, LLC. All rights reserved.



www.inrcore.com

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

**INRCORE**:

PL2073NLT PL2073T PL2073NL