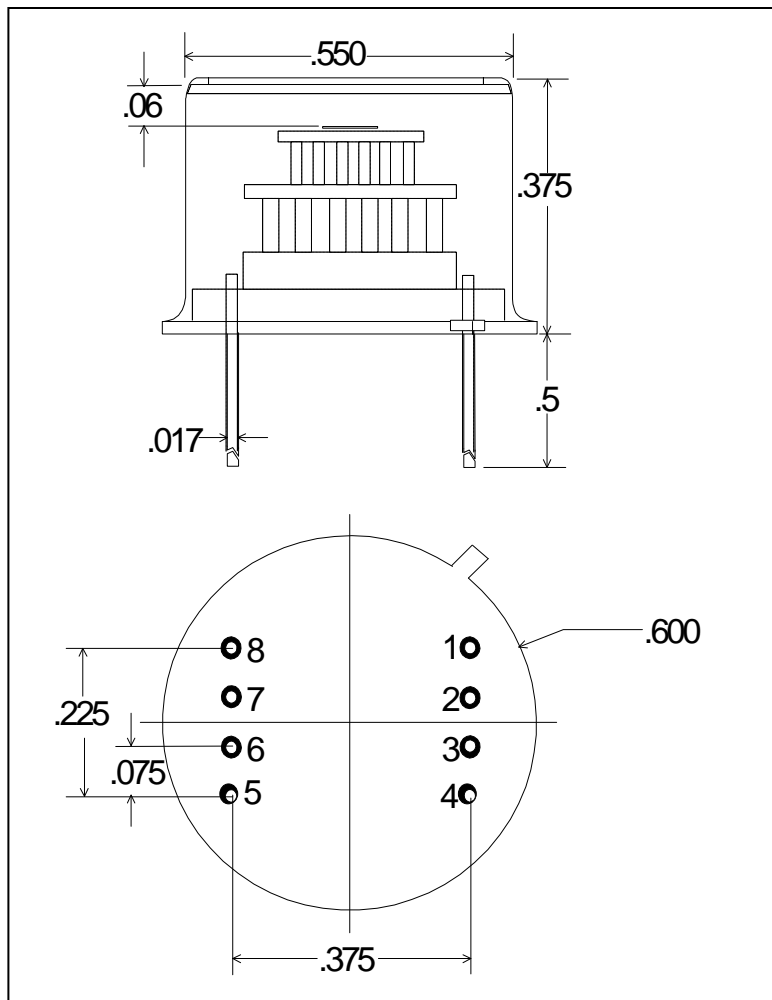


TE - COOLED PHOTODIODE



Part No:

G-010-TE2

PIN OUT

- 1 = COOLER (-)
- 2 = THERMISTOR
- 3 = THERMISTOR
- 4 = COOLER (+)
- 5 = DETECTOR CATHODE
- 6 = DETECTOR ANODE
- 7 = NO CONNECT
- 8 = NO CONNECT

Note: Dimensions in Inches

Operating Note

The TE cooled photodiode series consists of a high performance photodiode mounted on a thermoelectric cooler, all housed in a TO-8 package. A thermistor is mounted to the TEC's cold plate to provide a precise, reliable temperature monitor. Before operation VERIFY ELECTRICAL WIRING, else catastrophic damage may be sustained by the unit. Electrical power consumption can exceed 2.5 Watts (2V / 1.25A).

Therefore this package must be suitably heat sunk. Thermal grease with secure clamping is recommended for power dissipation. Temperature levels below -45°C are possible with an optimized mechanical assembly.

SPECIFICATIONS – 1mm DIA GERMANIUM PHOTODIODE

| | | |
|--|-----------------------|-----------------------|
| Operating Temperature ($^{\circ}\text{C}$) | 22 | -30 |
| Shunt Resistance (Ω) | 200 k | 100 M |
| Shunt Capacitance (pF) | 1500 | 1500 |
| NEP @ 1.3 μm (W) | 3.0×10^{-13} | 1.5×10^{-14} |
| Thermistor Resistance ($\text{k}\Omega$) | 1.5 | 40.0 |
| Cooler Current (A) | 0.00 | 0.60 TYP. |
| Maximum Cooler Current (A) | 1.25 | |