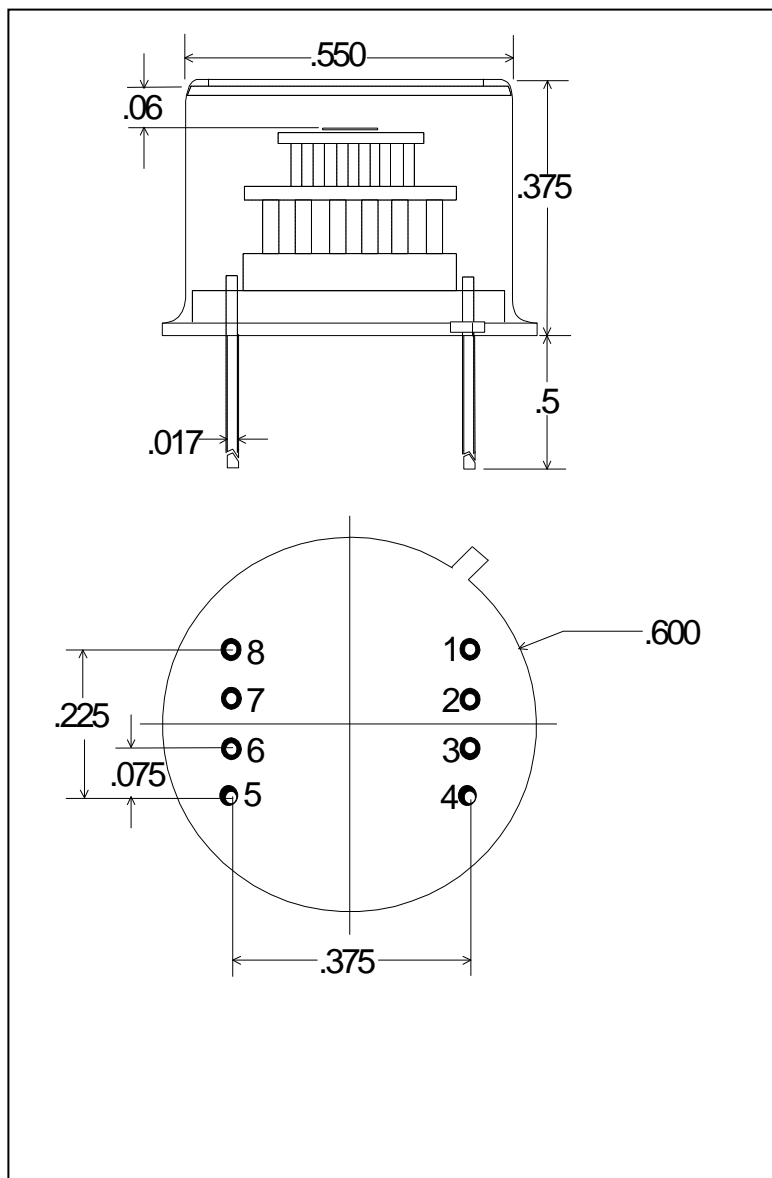


## TE - COOLED PHOTODIODE



**Part No:** G-050-TE2

### PIN OUT

- 1 = COOLER (-)
- 2 = Thermistor
- 3 = Thermistor
- 4 = COOLER (+)
- 5 = DETECTOR CATHODE
- 6 = DETECTOR ANODE
- 7 = n/c
- 8 = n/c

**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 – 5mm DIA GERMANIUM PHOTODIODE

Operating Temperature (°C)	22	-30
Shunt Resistance (Ω) MIN.	20 k	5 M
Shunt Capacitance (pF) TYP	30000	30000
NEP @ 1.3 μm (W)	$1.5 \times 10^{-12}$	$6.0 \times 10^{-14}$
Thermistor Resistance (kΩ)	1.5	40.0
Cooler Current (A)	0.00	0.60 TYP.
Maximum Cooler Current (A)	1.25	