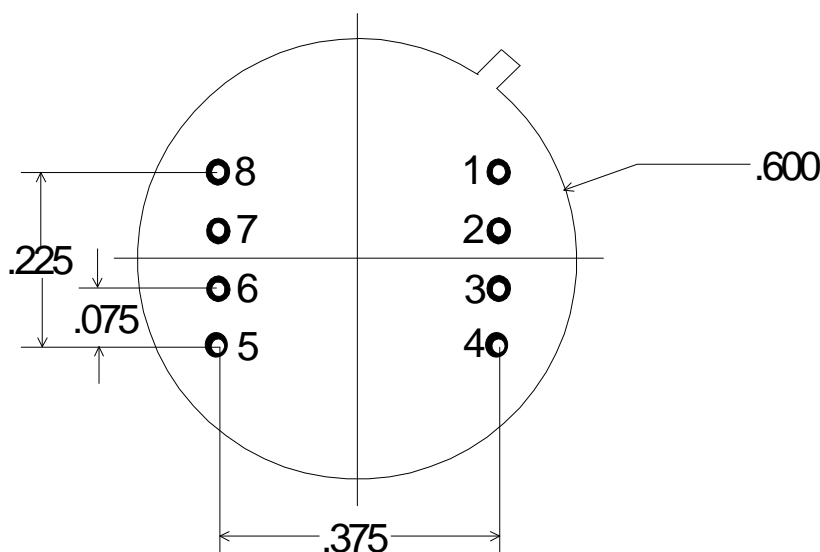
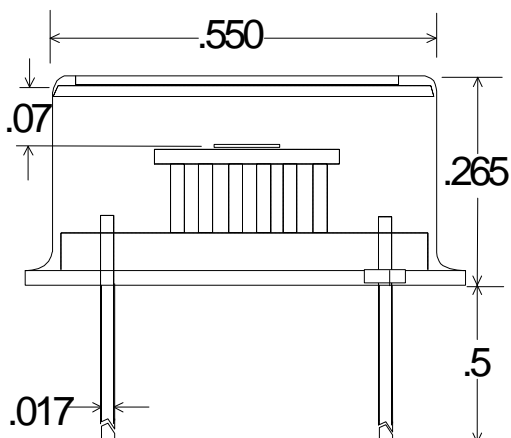


TE-COOLED PHOTODIODE



Part No: G - 050 - TE1

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 -25°C are possible with an optimized mechanical assembly.

SPECIFICATIONS

Detector Type	5 mm Germanium Photodiode (One Stage Cooler)	
Operating Temperature (°C)	23	-10
Shunt Resistance (kΩ)	15.	> 100
Shunt Capacitance (pF)	30,000 typ	30,000 typ
Responsivity @ 1.55 μm (A/W)	0.9	0.9
Thermistor Resistance (kΩ)	1.6 typ	7.8 typ
Cooler Current (A)	0.0	0.55
Maximum Cooler Current (A)	1.00	