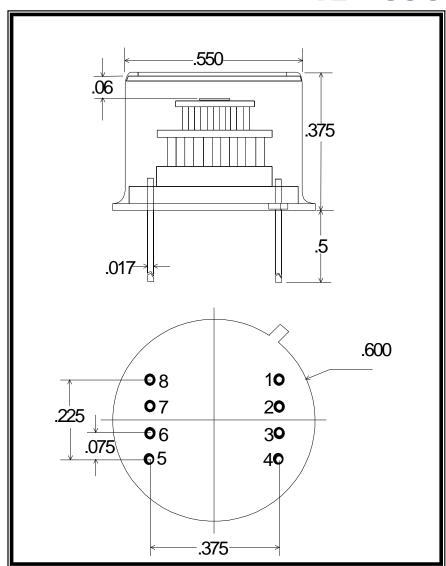




## TE - COOLED PHOTODIODE



Part No: **IGA2.2-010-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 thermoelectric cooler, all housed in a A thermistor is TO-8 package. mounted to the TEC's cold plate to provide a precise, reliable temperature 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 secure clamping recommended for power dissipation. levels Temperature below -45°C are possible with ontimized mechanical assembly.

SPECIFICATIONS		
Detector Type	1mm DIA extended InGaAs ( TE-Cooled )	
Operating Temperature (°C)	22	-30
Shunt Resistance (kΩ)	3 typ	200 typ
Shunt Capacitance (pF), typ	420	220
Responsivity @ 2.2 μm (A/W)	1.0	1.0
NEP (W/Hz <sup>1/2</sup> ) 2.1um, 100Hz	< 5 x 10 <sup>-12</sup>	< 5 x 10 <sup>-13</sup>
Thermistor Resistance (kΩ) typ	1.5 typ	40.0 typ
Cooler Current (A) typ	0.00	0.60 TYP.
Maximum Cooler Current (A)	1.25	