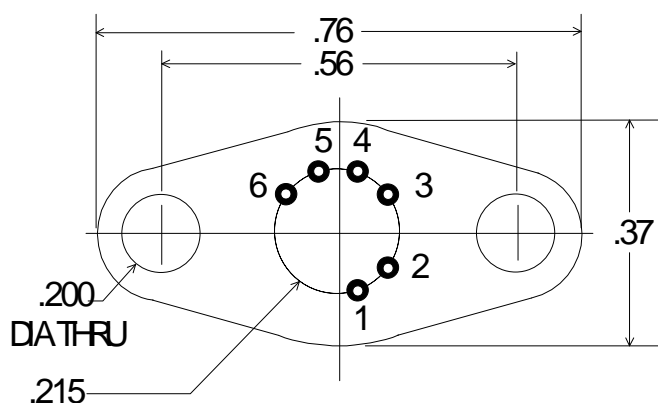
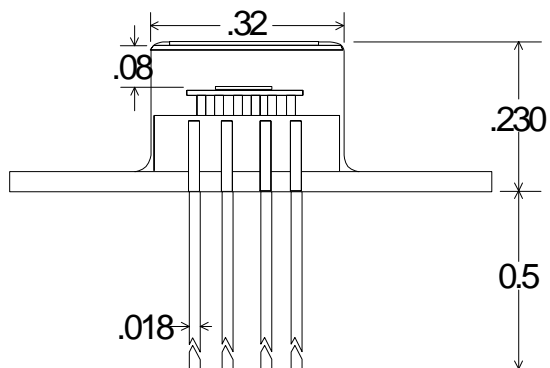


TE - COOLED PHOTODETECTOR



Part No:

IGA - 010 - TE1 / TO37

PIN OUT

- 1 = THERMISTOR**
- 2 = THERMISTOR**
- 3 = COOLER (+)**
- 4 = COOLER (-)**
- 5 = DETECTOR ANODE**
- 6 = DETECTOR CATHODE**

Note:

Dimensions in Inches

Operating Note

The TE cooled photodetector series consists of a high performance photodiode mounted on a thermoelectric cooler, housed in a hermetic TO-37 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 1 Watts; therefore, this package must be suitably heat sunk. Thermal grease with secure clamping is recommended for power dissipation. Temperature levels below -15°C are possible with an optimized mechanical assembly.

SPECIFICATIONS

Detector Type	1.0 mm dia. InGaAs	
Operating Temperature ($^{\circ}\text{C}$)	22	-10
Shunt Resistance ($\text{M}\Omega$) min	100	> 1000
Cut-off Wavelength (50%)	1.0 - 1.7	1.0 - 1.65
Shunt Capacitance (pF) typ.	80	80
Responsivity @ peak (A/W)	0.9	0.9
NEP @ λ pk, 100 Hz, ($\text{W/Hz}^{1/2}$)	$< 1.5 \times 10^{-14}$	$< 1.0 \times 10^{-14}$
Cooler Current (A)	0.	0.6 nom
Thermistor Resistance ($\text{k}\Omega$)	1.5 nom	10. nom

RoHS Compliant