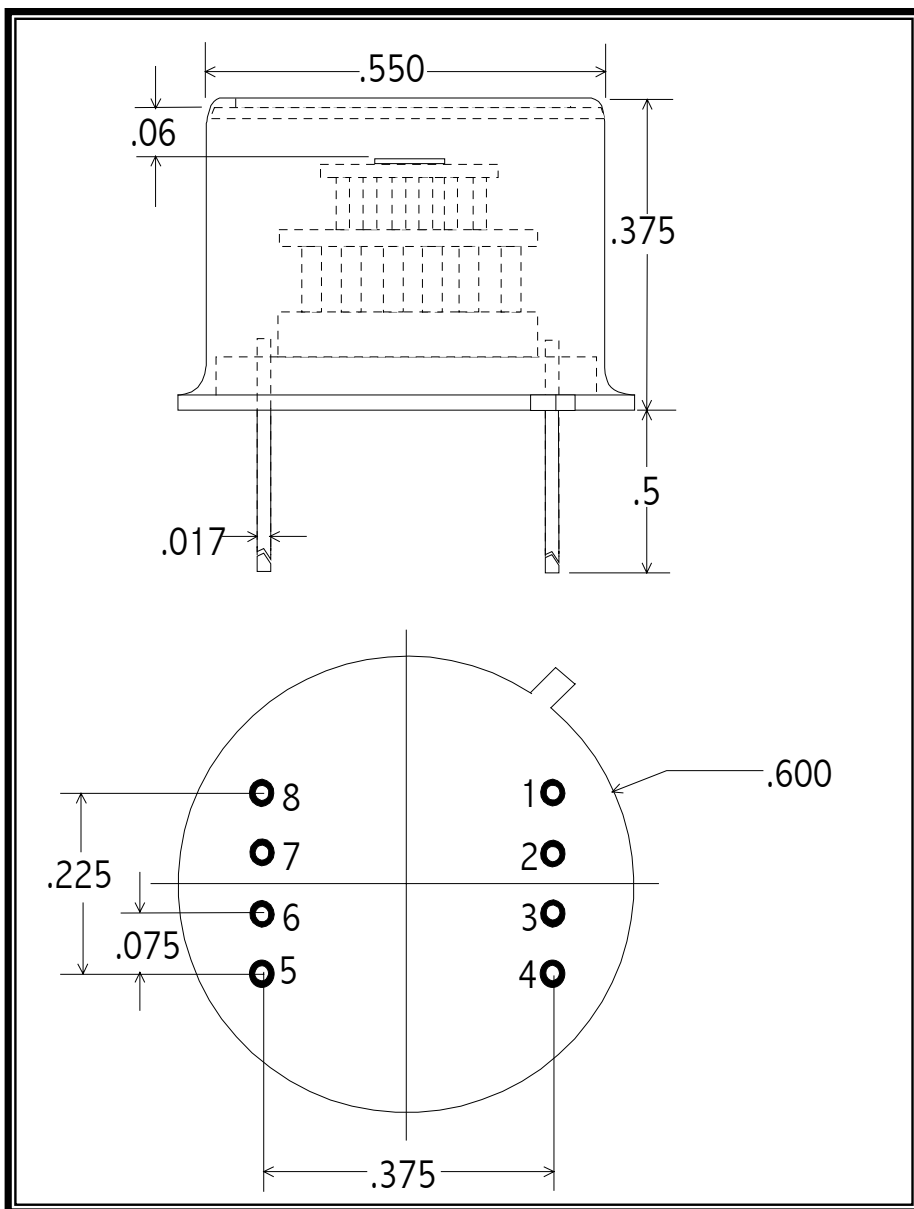


TE COOLED MCT - SERIES PHOTOCONDUCTOR


Part No:
MCT4.5-010-TE2
PIN OUT

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

Operating Temperature (°C)	22	-30
Operating Wavelength	1. - 4.5 typ	1. - 4.8 typ
Resistance (Ω)	50 - 200	100 - 300
D* (pk, 10kHz,1Hz), cm-Hz ^{1/2} /W	1 x 10 ¹⁰	4 x 10 ¹⁰
Responsivity, V/W @ pk=4.8 μm	200	1000
Thermistor Resistance (kΩ)	1.6	40
Cooler Current (A)	0	0.75
Maximum Cooler Current (A)	1.25	