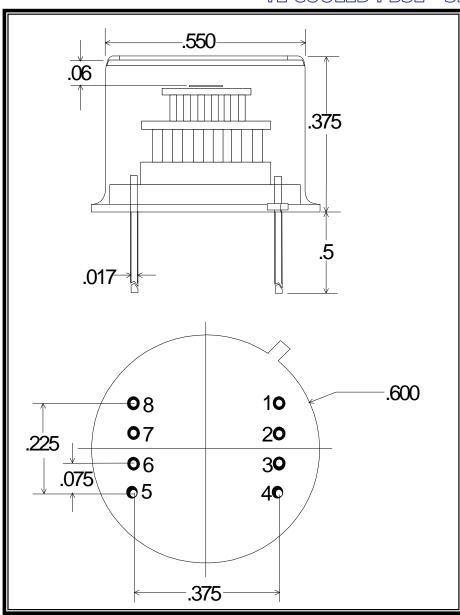




## TE COOLED PBSE - SERIES PHOTOCONDUCTOR



Part No: PBSE - 050 - 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 photodetector series consists of a high performance photodetector mounted on 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 clamping secure recommended for power dissipation. Temperature levels below -45°C are possible with an optimized mechanical assembly.

SPECIFICATIONS		
Detector Type	5mm x 5mm PbSe Photoconductor	
Operating Temperature (°C)	22	-30
Shunt Resistance (M $\Omega$ )	0.1 - 1.0	.5 – 3.0
D* (pk, 1 kHz, 1 Hz)	> 2 x 10 <sup>9</sup>	1.0 x 10 <sup>10</sup>
Responsivity @ pk (V/W)	1000	1 x 10 <sup>4</sup>
Thermistor Resistance (kΩ)	1.6 typ	40 typ
Cooler Current (A)	0.00	0.60 typ
Maximum Cooler Current (A)	1.25	