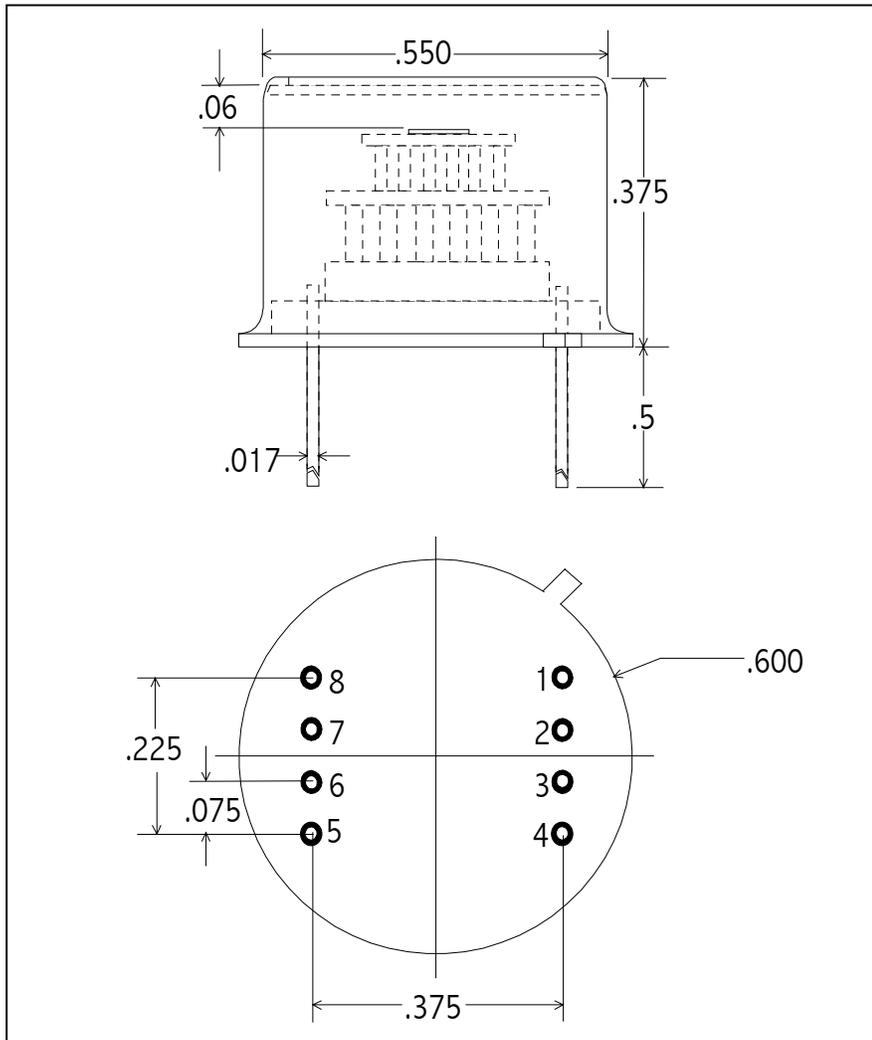


2-COLOR TE-COOLED DETECTOR



Part No:

UVS/PBS-025/020-TE2

PIN OUT

- 1 = COOLER (-)
- 2 = THERMISTOR
- 3 = THERMISTOR
- 4 = COOLER (+)
- 5 = BOTTOM DETECTOR
- 6 = BOTTOM DETECTOR
- 7 = TOP ANODE
- 8 = TOP CATHODE

Note: Dimensions in inches

Operating Note

This TE cooled 2-color series detector consists of a high performance photodiode / photoconductor 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

Detector Type	Top: 2.5 mm dia UV Silicon	Bottom: 2 mm x 2 mm PbS
Operating Temperature - ($^{\circ}\text{C}$)	22 / -30	22 / -30
Shunt Resistance - (Ω), min	100M / $> 10^9$	1M / 3M typ.
Shunt Capacitance - (pF), typ	300 / 290	N/A
Responsivity @ pk	0.5 A/W	1×10^5 / 3×10^5 V/W
Operating Wavelength - (nm)	200 - 1000	1000 / 2800
Thermistor Resistance - ($\text{k}\Omega$) typ	1.8 / 40	
Cooler Current - (A) typ	0.00 / 0.6	
Maximum Cooler Current - (A)	1.25	