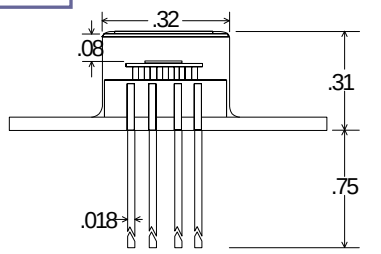
TE - COOLED PHOTODETECTOR

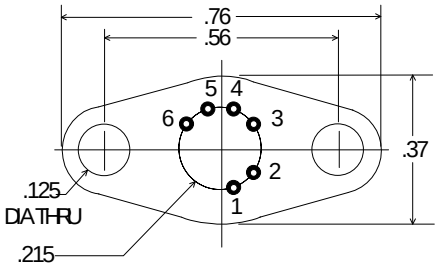
Part no.
PBSE-010-TE1/TO37

PIN OUT

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

Note:
Dimensions in Inches



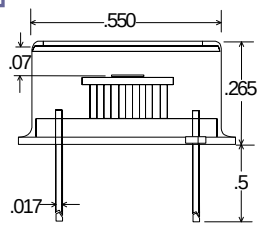


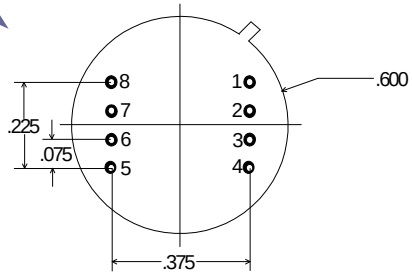
Part no.
PBSE-010-TE1

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 photoconductor mounted on a thermoelectric cooler, all housed in a 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 1watt (1V / 1.00A); therefore, this package must be suitably heat sunk. Thermal grease with secure clamping is recommended for power dissipation. Temperature levels below –10°C are possible with an optimized mechanical assembly.

SPECIFICATIONS		
Operating Temperature (°C)	**22**	**-10**
Active Area	**1 mm x 1 mm**	
Resistance (MΩ)	**0.2 - 1.0**	**0.4 - 2.0**
Responsivity (4.2um) V/W, Vbias=100V w/1M series resistor	**> 10^4**	**> 2 x 10^4**
D*(4.2um,1kHz,1Hz) cm-H1/2/W	**> 5 x 10^9**	**> 1.5 x 10^{10}**
Thermistor Resistance (kΩ)	**1.7 nom**	**7.5 nom**
Cooler Current (A)	**0.0**	**0.65**
Maximum Cooler Current (A)	**1.00**	

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