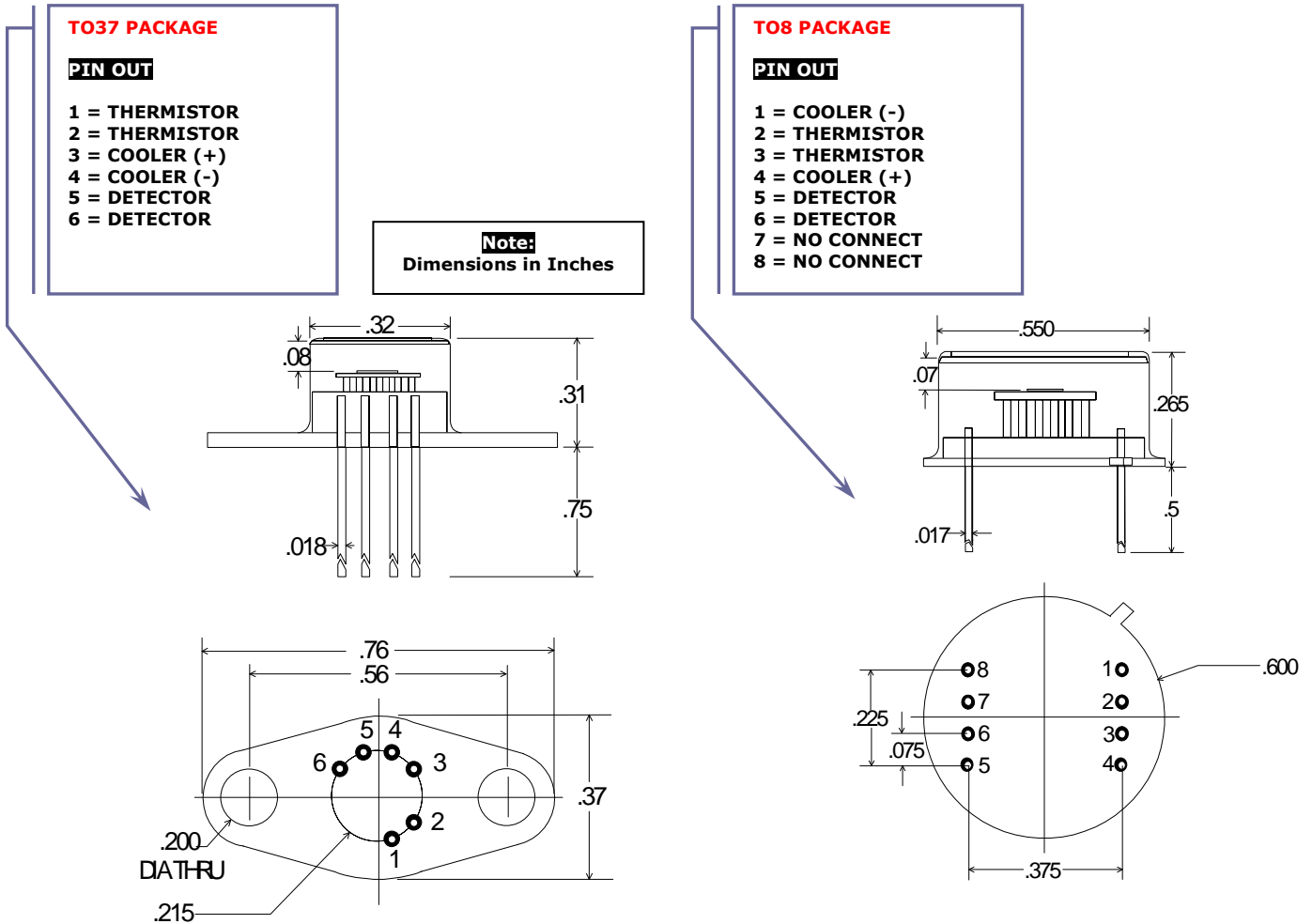


TE - COOLED PHOTODETECTOR



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

Part Number	PBS - 010 - TE1	PBS - 020 - TE1	PBS - 030 - TE1
Operating Temperature (°C)			
Active Area	1 mm x 1 mm	2 mm x 2 mm	3 mm x 3 mm
Detector Resistance (Ω), typ			
Responsivity (2.6um) V/W,			
D*(2.6um,500Hz,1Hz) cm-Hz ^{1/2} /W			
Thermistor Resistance (kΩ)			
Cooler Current (A)			
Maximum Cooler Current (A)	1.00		