GE
Sensing

Applications

- Non-contact thermometers
- Climate control in vehicles
- Skin thermometers

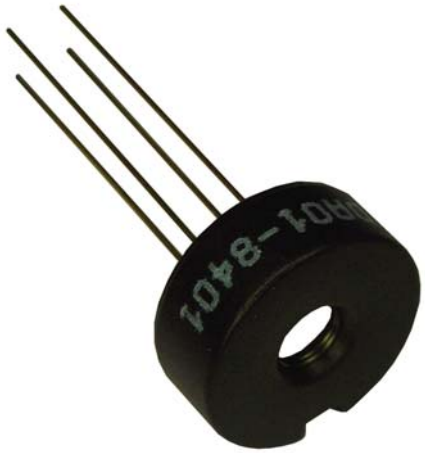
Features

- High sensitivity
- Included ambient temperature (thermistor) sensor for compensation
- Fast response time

This thermopile sensor is used for non-contact surface temperature measuring. The ZTP-315D1 model consists of thermo-elements, a flat IR filter, thermistor for temperature compensation and a hermetically-sealed TO-5(39) package with heat sink. There is also a variety of filters available to help maximize performance in specific applications.

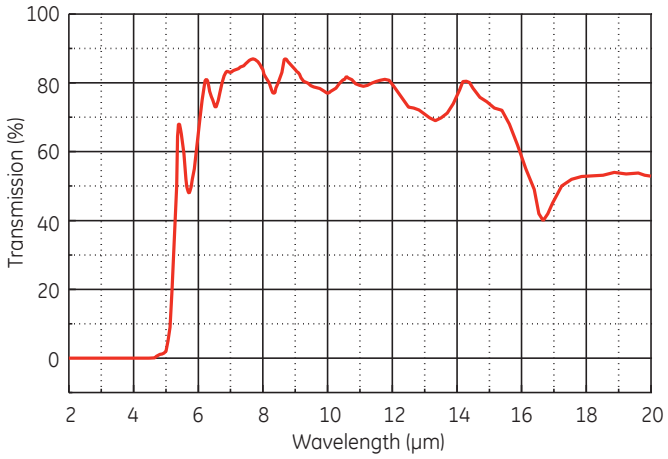
ZTP-315D1
Thermometrics IR Sensor

ZTP-315D1 is a Thermometrics product. Thermometrics has joined other GE high-technology sensing businesses under a new name– GE Industrial, Sensing.

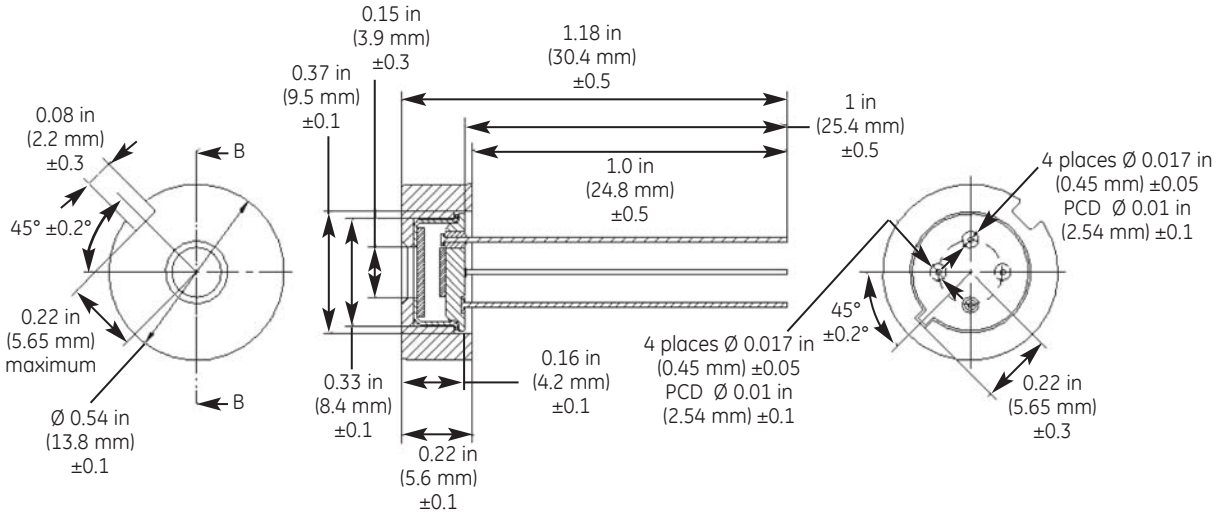


GE
Sensing

ZTP-315D1 Specifications



Parameter	Unit	Value	Condition
Chip Size	mm^2	3.6 x 3.6	–
Diaphragm Size	mm^2	2.6 x 2.6	–
Number of Couples	–	68	–
Active Area	mm^2	1.3 x 1.3	–
Internal Resistance	kΩ	50 ±20%	–
Resistance T.C.	% °F (°C)	< 0.12	–
Responsitivity	V/W	32 ±30%	500K, 1 Hz
Responsitivity T.C.	% °F (°C)	-0.11	Typical
Noise Voltage	nV rms	30	R.M.S, Typical
NEP	nW/ √Hz	0.94	500K, 1 Hz, Typical
Detectivity	cn √Hz/W	1.38E + 08	500K, 1 Hz, Typical
Time Constant	ms	24	500K, 1 Hz, Typical
Operating Temperature	°F (°C)	-4°F to 212°F (-20°C to 100°C)	–
Storage Temperature	°F (°C)	-40°F to 248°F (-40°C to 120°C)	–
Thermistor Resistance Beta	kΩ K	30 ±1% 3811 ±1%	@ 77°F (25°C)
Package Type	–	TO-5	–



ZTP-315D1 dimensions

920-162B

www.gesensing.com