

# GE Sensing

## Applications

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

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.

## Features

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

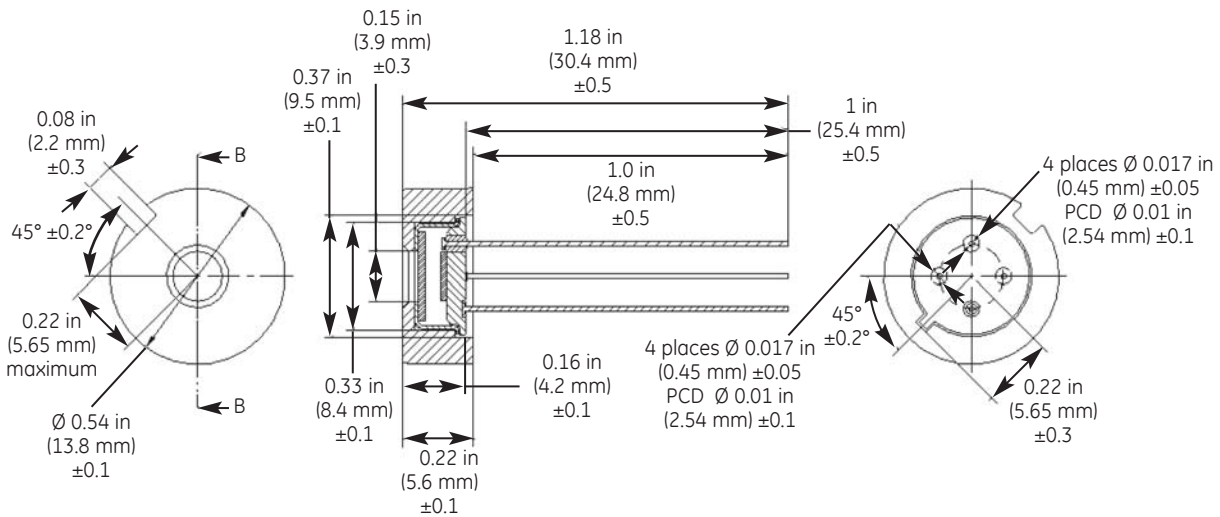
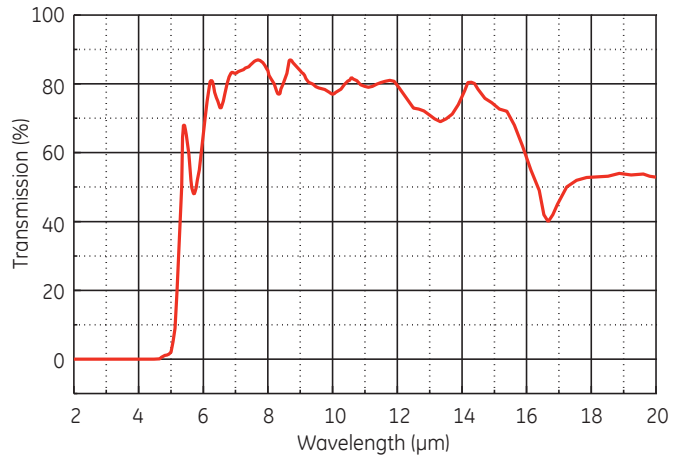
# ZTP-315D1 Thermometrics IR Sensor

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



# ZTP-315D1 Specifications

Parameter	Unit	Value	Condition
Chip Size	mm <sup>2</sup>	3.6 × 3.6	—
Diaphragm Size	mm <sup>2</sup>	2.6 × 2.6	—
Number of Couples	—	68	—
Active Area	mm <sup>2</sup>	1.3 × 1.3	—
Internal Resistance	kΩ	50 ±20%	—
Resistance T.C.	% °F (°C)	< 0.12	—
Responsivity	V/W	32 ±30%	500K, 1 Hz
Responsivity 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	kΩ	30 ±1%	@ 77°F (25°C)
Beta	K	3811 ±1%	
Package Type	—	TO-5	—



ZTP-315D1 dimensions



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SUNSTAR自动化 <http://www.sensor-ic.com/> TEL: 0755-83376489 FAX:0755-83376182 E-MAIL: szss20@163.com

[www.gesensing.com](http://www.gesensing.com)