



T H E R M O M E T R I C S
A C O M M I T M E N T T O E X C E L L E N C E

ZTP-315D1

Thermometrics IR Sensor



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.

Applications

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

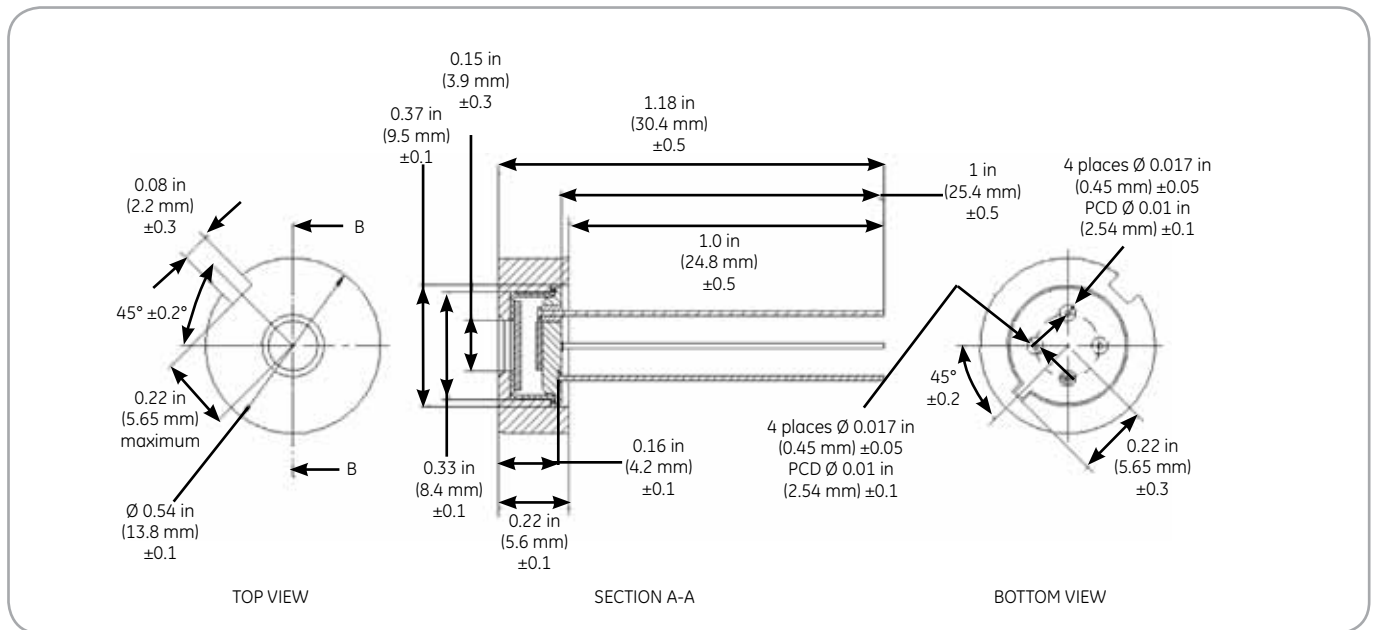
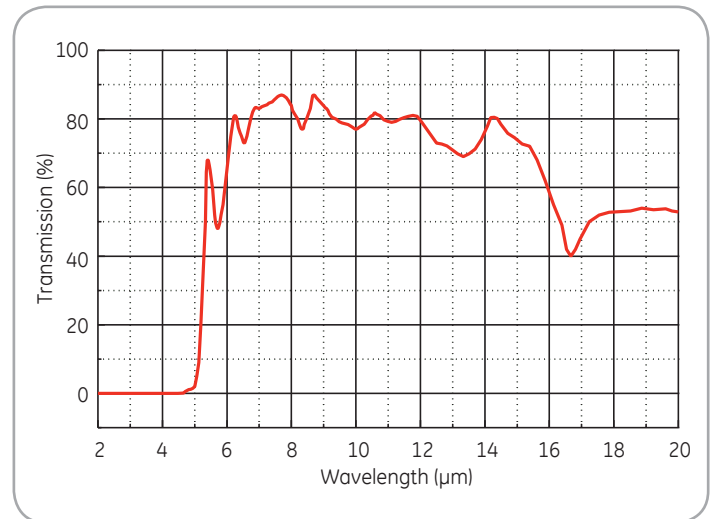
Features

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

Amphenol
Advanced Sensors

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	-
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

Amphenol
Advanced Sensors

www.amphenol-sensors.com

© 2014 Amphenol Corporation. All Rights Reserved. Specifications are subject to change without notice. Other company names and product names used in this document are the registered trademarks or trademarks of their respective owners.