

Sensing

Applications

- Ear thermometers
- Non-contact thermometers

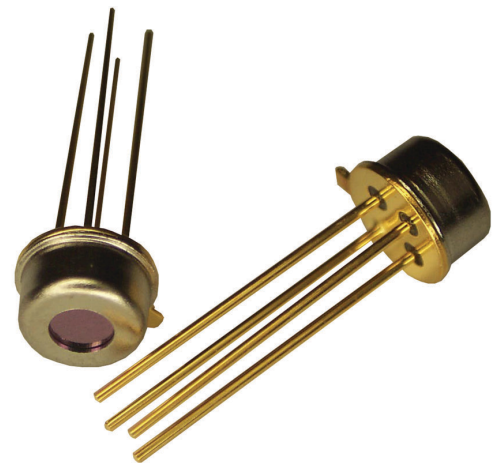
Features

- Small-size sensor (TO-46 package)
 - Included ambient temperature (thermistor) sensor for compensation
 - High sensitivity
 - Fast response time
 - Low cost
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This thermopile sensor is used for non-contact surface temperature measuring. The ZTP-135SR model consists of thermo-elements, flat IR filter, a thermistor for temperature compensation in a hermetically-sealed TO-46(18) package. There is also a variety of filters available to help maximize performance in specific applications.

ZTP-135SR Thermometrics IR Sensor

ZTP-135SR is a Thermometrics product. Thermometrics has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



ZTP-135SR Specifications

Parameter	Unit	Value	Condition
Chip Size	mm ²	1.8 x 1.8	—
Diaphragm Size	mm ²	1.4 x 1.4	—
Number of Couples	—	60	—
Active Area	mm ²	0.7 x 0.7	—
Internal Resistance	k Ω	60 \pm 30%	@ 77°F (25°C)
Resistance T.C.	% °F (°C)	< 0.12	—
Responsivity	V/W	62 \pm 30%	500K, 1 Hz
Responsivity T.C.	% °F (°C)	0.10	Typical
Noise Voltage	nV rms	32	R.M.S, Typical
NEP	nW/ \sqrt Hz	0.51	500K, 1 Hz, Typical
Detectivity	cn \sqrt Hz/W	1.35E + 08	500K, 1 Hz, Typical
Time Constant	ms	25	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	k Ω	100 \pm 3%	@ 77°F (25°C)
Beta	K	3960 \pm 1%	
Package Type	—	TO-41	—

