

GE Sensing

Applications

- Nondispersive Infrared (NDIR) CO₂ detection (dual sensor)

Features

- TO-5 package
- Included ambient temperature (thermistor) sensor for compensation
- High sensitivity
- Fast response time
- Low cost

NDIR detectors are simple optical devices often used for gas analysis. The ZTP-135D model consists of dual thermo-elements, a dual narrow band path (NBP) filter (one for sensing and the other for reference), a thermistor for temperature compensation and hermetically-sealed TO-5(39) package. This NDIR thermopile detector can provide the customer with other narrow band path (NBP) filters for analyzing various gases.

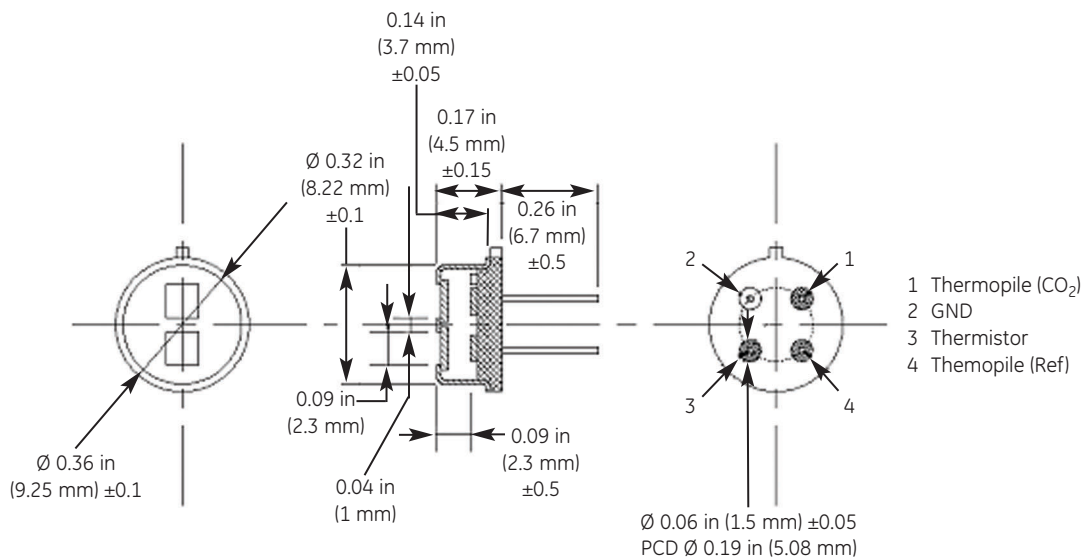
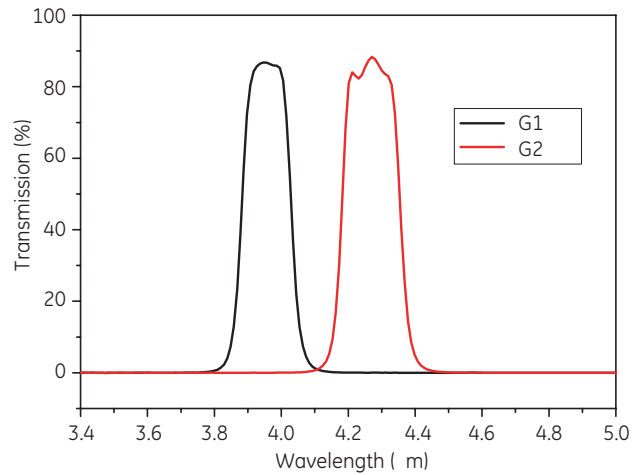
ZTP-135D-G13 Thermometrics CO₂ Detector

ZTP-135D-G13 is a Thermometrics product. Thermometrics has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



ZTP-135D-G13 Specifications

Parameter	Limits		Units	Condition
	Minimum	Type		
Chip Size	–	1.8 x 1.8	–	mm ² 2 chips in package
Diaphragm Size	–	1.4 x 1.4	–	mm ² –
Active Area	–	0.7 x 0.7	–	mm ² –
Internal Resistance	42	60	78	kΩ 77°F (25°C)
Resistance T.C.	–		0.12	% °F (°C) –
Responsivity	43	62	81	V/W 500K, 1 Hz standard filter
Responsivity T.C.	–	-0.10	–	%°F (°C) –
Noise Voltage	–	32	–	nV rms R.M.S, 77°F (25°C)
NEP	–	0.51	–	nW/ Hz ^{1/2} 500K, 1 Hz, standard filter
Detectivity	–	1.35 E08	–	cn Hz ^{1/2} /W 500K, 1 Hz, standard filter
Time Constant	–	25	–	ms –



ZTP-15D-G13 dimensions

