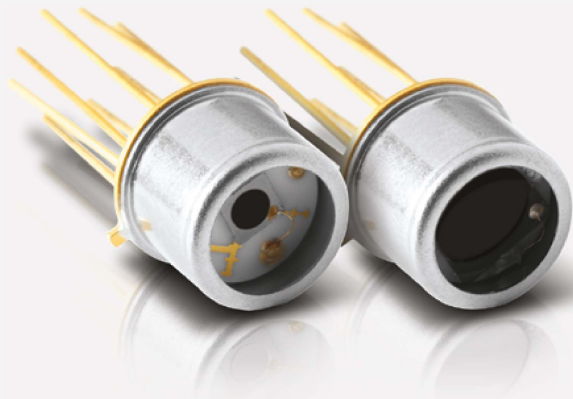


QS-THZ

Hybrid THz detectors



* Pictures for indicative purposes only

KEY FEATURES

- **RELATIVE MEASUREMENTS FROM 0.1 TO 30 THZ**
Broadband, room temperature operation, easier to use and less expensive than a Golay cell
- **EASY TO INTEGRATE FORMAT**
TO5 and TO8 packages make the QS-THZ detectors small and easy to integrate in an existing system
- **SEVERAL SENSOR SIZES AVAILABLE**
Choice of 5 and 9 mm Ø
- **CALIBRATED AT 0.63 µm**
All THz detectors are calibrated at a single wavelength (0.63 µm) and include a typical wavelength correction data from 0.25 to 440 µm. They are used for relative measurements outside that range.
- **TEST BOX AVAILABLE**
Can be used with our QS-I-TEST test box which provides mounting and power supply

PERMANENT IR WINDOW OPTIONS

Every model can be fitted with a permanent IR window to narrow the wavelength range:

- S5/8: sapphire (0.3 - 4.5 and 100 - 1000 µm)
- Q5/8: quartz (0.25 - 3.0 and 50 - 1000 µm)
- Si5/8: silicon (1.2 - 8.0 and 50 - 1000 µm)

ACCESSORIES



QS-I-Test
evaluation test box



Permanent IR Windows
(Various types available)



SDC-500 digital
optical chopper



Pelican carrying case



	QS-THZ-BL	QS9-THZ-BL
VOLTAGE RESPONSIVITY	70kV/W	30 kV/W
EFFECTIVE APERTURE	5 mm Ø	9 mm Ø
PACKAGE	TOS	TOB

MEASUREMENT CAPABILITY

Spectral range^a		
Frequency	0.1-30THz	0.1 - 30 THz
Wavelength	3000-10 µm	3000-10 µm
Max power density	50 mW/cm ²	50 mW/cm ²
Noise equivalent power	10 X 10 ⁻⁹ W/(Hz) ^{1/2}	3.0 X 10 ⁻⁹ W/(Hz) ^{1/2}
Detectivity ^b	4.10 ⁷ cm(Hz) ^{1/2} /W	2.7.10 ⁷ cm(Hz) ^{1/2} /W
Voltage responsivity ^b	120 kV/W	30kV/W

PHYSICAL CHARACTERISTICS

Effective aperture	5 mm Ø	9 mm Ø
Package	TOS	TOB
Sensor	Pyroelectric	Pyroelectric
Absorber	BL	BL
Dimensions (excluding pins)	9.10 x 6.4D mm	15.20 x 6.4D mm
Weight	45g	45g

ORDERING INFORMATION

Product page		
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- a Projected Spectral Range.
From 10 to 440 µm, spectrometer measurement.
From 440 to 3000 µm, relative measurement only.
This spectral range is subject to change.
- b 630 nm, 5 Hz



QS-1-TEST EVALUATION TEST BOX

	QS-1-TEST
Batteries	+9V/-9V
R, resistors	105-10100
c, compensating	YES
Package	101.6H X 127W x 58.4D
Optical mount	1/2-20 threaded
Front bezel	SMI (I.035-40)
Product number	201693

¹ For details, contact your Gentec-EO representative