

# QS9-IF

P/N 201683

Hybrid pyroelectric sensor with metallic coating. Fast response.



## KEY FEATURES

### BROAD SPECTRAL RESPONSE

From 0.1 to 1000  $\mu\text{m}$

### 4 FAMILIES OF PRODUCTS TO CHOOSE FROM:

- QS-L: discrete pyro detectors, low noise level
- QS-H: discrete pyro detectors, high average power
- QS-IF: hybrid pyro detectors, current mode, fast response
- QS-IL: hybrid pyro detectors, current mode, low noise level

### EASY TO INTEGRATE FORMAT

TO5 and TO8 packages make the QS-H detectors small and easy to integrate in an existing system.

### LARGE AREA SENSORS

5 mm and 9 mm diameter pyroelectric sensors make optical alignment easier.

### SEVERAL IR WINDOWS IN OPTION

- Quartz: 0.2 – 3.5  $\mu\text{m}$
- Barium fluoride: 0.2 – 17.5  $\mu\text{m}$
- Sapphire: 0.1 – 7.0  $\mu\text{m}$
- Silicon: 1.2 – 9.0  $\mu\text{m}$  and 22 – 100  $\mu\text{m}$
- AR germanium: 1.8 – 23  $\mu\text{m}$  (10.6  $\mu\text{m}$  peak)

## MEASUREMENT CAPABILITIES

Maximum average power	50 mW
Noise equivalent power <sup>1</sup>	160 nW
Spectral range	0.1 - 1000 $\mu\text{m}$
Current responsivity	0.25 $\mu\text{A/W}$
Thermal frequency	0.25 Hz
Voltage responsivity <sup>2</sup>	25 V/W
Feedback resistor	100 M $\Omega$
Supply voltage	$\pm 12$ V

1. 630 nm, 5 Hz, 1 Hz bandwidth
2. 630 nm, 15 Hz

## PHYSICAL CHARACTERISTICS

Aperture diameter	9 mm
Absorber	MT
Dimensions	15.2 $\varnothing$ x 6.4D mm
Weight	0.0015 kg
Package	TO8