

# PR43

## TECHNICAL DATA

### Mid-Infrared Photoresistor

PR43 is a photoresistor, with a sensitive area of 2.0 x 2.0 mm. It is mounted into a TO-5 with cap and silicon window.

#### Features

- Spectral Sensitivity Range: 1.0 – 4.5  $\mu\text{m}$
- Sensitive Area: 2.0 x 2.0 mm
- Package: TO-5, with window

#### General Characteristics

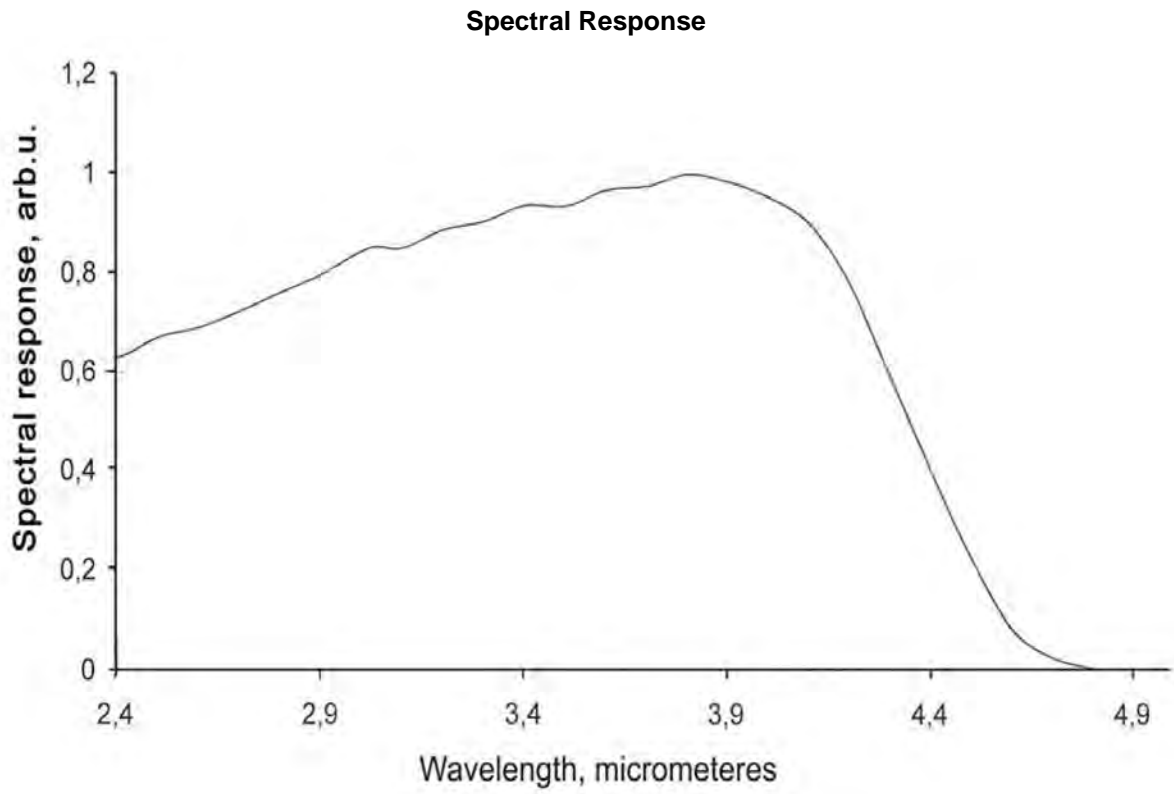
Item	Symbol	Value	Unit
Sensitive Area	a	2.0 x 2.0	mm
Operating Temperature	T <sub>OP</sub>	-40 ... +50	°C
Window Material		Silicon	
Soldering Temperature	T <sub>slid</sub>	230	°C
Storage Temperature	T <sub>stg</sub>	-40 ... +60	°C
Working Voltage	T <sub>b</sub>	5 $\pm$ 1	V

#### Electrical and Optical Characteristics (Ta=20°C)

Item	Symbol	Value	Unit
<b>Optical Specifications</b>			
Spectral Sensitivity Range (50%)	$\lambda$	1.0 – 4.5	$\mu\text{m}$
Peak Sensitivity Wavelength (>90%)	$\lambda_P$	3.8 $\pm$ 0.1	$\mu\text{m}$
Zero Bias Resistance (10mV)	R	20 – 100	k $\Omega$
Detectivity (573K, 800 Hz, 1 Hz)	D*	[5 – 10]·10 <sup>8</sup>	cm·Hz <sup>1/2</sup> ·W <sup>-1</sup>
Photo Sensitivity (at $\lambda_P$ )	S	350 – 1000	V/W
Rise and Fall Time (at I <sub>pd</sub> = 10 $\mu\text{s}$ )	t <sub>r</sub>	10	$\mu\text{s}$

The above specifications are for reference purpose only and subjected to change without prior notice.

### Typical Characteristics



### Application Note

