Pyroelectric Infrared Sensors



Temperature Compensation Single Type Pyroelectric Infrared Sensor IRA-E420 Series

Single type pyroelectric infrared sensors IRA-E420 series have a temperature compensation element.

They are suitable for flame detection and gas detection.

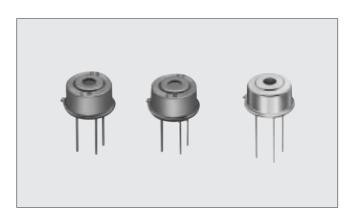
Features

- 1. High stability against abrupt ambient temperature changes
- 2. High immunity to external noise (Vibration, RFI etc.)
- 3. Custom design is available with varying optical filter.

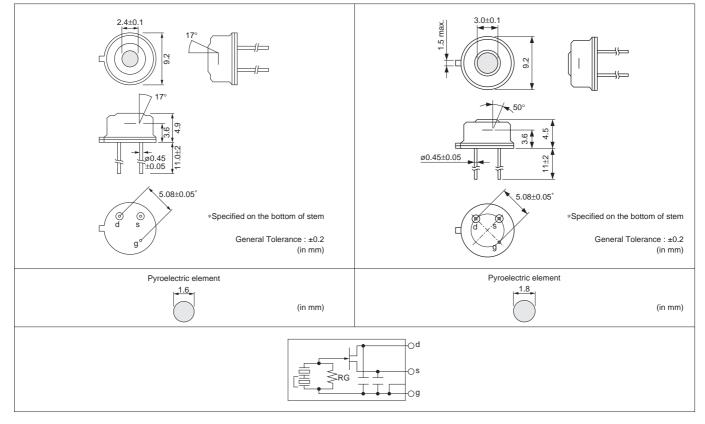
Applications

Part Number	Optical Filter	Applications
IRA-E420S1	Silicon	1-15µm infrared detection
IRA-E420QW1	4.30µm band-pass	Flame detection
IRA-E420SW1	4.45µm band-pass	Flame detection

Dimensions & Circuit Diagrams (IRA-E420S1, IRA-E420QW1)



(IRA-E420SW1)





(Note • This PDF catalog is downloaded from the website of Murata Manufacturing co., ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering. • This PDF catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering. 07.8.24

■ Rating (25°C)

Part Number	IRA-E420S1	IRA-E420QW1	IRA-E420SW1
Responsivity (500K, 1Hz, 1Hz)	3.4mV _{p-p} (Тур.)	1.3mV _{p-p} (Typ.)*	0.45mV _{p-p} (Typ.)
Field of View	$\theta_1=\theta_2=17^\circ$		$\theta_1 = \theta_2 = 50^{\circ}$
Optical Filter	Silicon	4.3µm band-pass	4.45µm band-pass
Electrode	ø1.6mm		ø1.8mm
Supply Voltage	3 to 15V		1
Operating Temperature	-25 to 70℃	-25 to 55℃	-25 to 70°C
Storage Temperature	-30 to 100°C		

* 700K, 5Hz, 1Hz

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