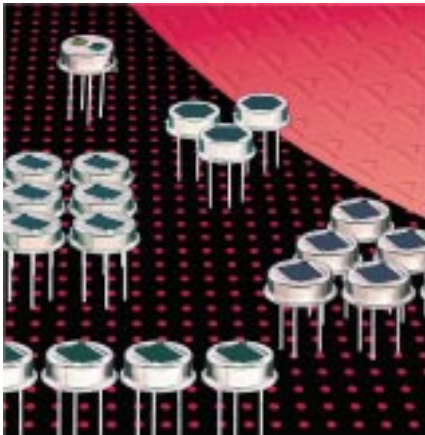


Motion Detection Applications

# Pyroelectric Detector LHi 1448

## Four Elements, Two FET Outputs

### Optical IR Window

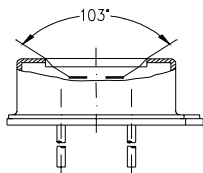


Twin element design

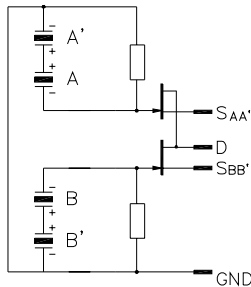
Designed for High End Alarm applications

The **LHi 1448** pyroelectric infrared detector is designed for high end PIR alarm applications. It includes a twin type pyro-electric ceramic with 4 sensitive elements connected to two FET source follower circuits. Thus it provides for dual channel output. Both channels are of the same polarity.

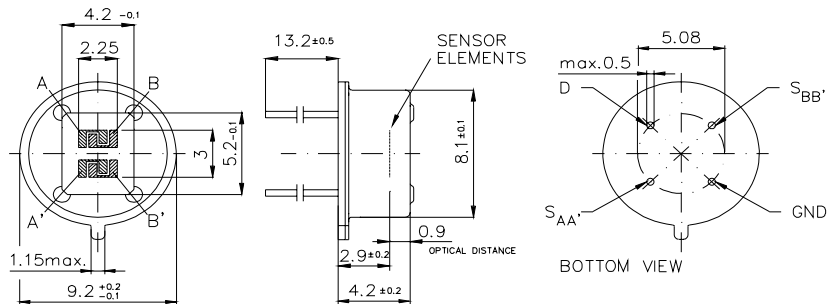
The LHi 1448 detector is available in TO-5 housing with standard infrared filter. It offers excellent common mode performance (match) and low noise.



Field of View



Parameters	LHi 1448			units	condition
	min	typical	max		
<b>Element size</b>		0,953		mm <sup>2</sup>	(4 elements)
<b>Responsivity</b>	4200	6500		V/W	100°C, 1 Hz
<b>Match</b>		1	15	%	
<b>Noise</b>		30	75	µVpp	25°C, 0,3...10Hz
<b>Offset Voltage</b>	0,2		1,55	V	R <sub>s</sub> =47kΩ, 25°C
<b>D*</b>	3,5x10 <sup>-7</sup>	11x10 <sup>-7</sup>		cm √Hz/W	1Hz Bw, 100°C, 1 Hz
<b>Output Impedance</b>		5	10	kΩ	R <sub>s</sub> =47kΩ, 25°C
<b>Operating Voltage</b>	2		12	V	R <sub>s</sub> =47kΩ, 25°C
<b>Field of View, horizontal</b>		103°			unobstructed
<b>Field of View, vertical</b>		96°			unobstructed
<b>Operating Temperature</b>	-40		85	°C	non permanent
<b>Storage Temperature</b>	-40		75	°C	non permanent



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