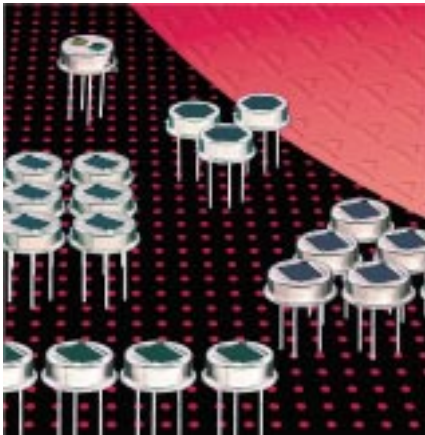


Motion Detection Applications

# Pyroelectric Detector LHi 1148

## Four Elements, Two FET Outputs

### Optical IR Window

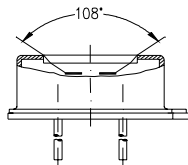


Quad element design

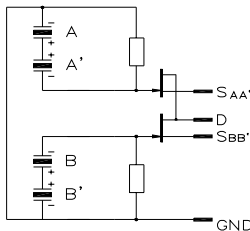
Designed for Alarm applications

The **LHi 1148** pyroelectric infrared detector is designed for high end PIR alarm applications. It includes a Quad type pyroelectric ceramic with 4 sensitive elements connected to two FET source follower circuits. Thus it provides for dual channel output. One channel is inverse to the other.

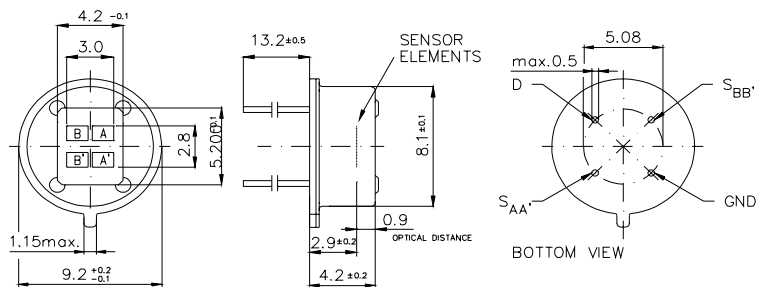
The **LHi 1148** detector is available in **TO-5** housing with standard infrared filter. It offers excellent common mode performance (match) and low noise.



Field of View



Parameters	LHi 1148			units	condition
	min	typical	max		
<b>Element size</b>		1,375x1		mm <sup>2</sup>	(4 elements)
<b>Responsivity</b>	3 500	4 500		V/W	100°C, 1 Hz
<b>Match</b>		1	10	%	
<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>	5x10 <sup>-7</sup>	14x10 <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>		108°			unobstructed
<b>vertical</b>		67°			unobstructed
<b>Operating Temperature</b>	-40		85	°C	non permanent
<b>Storage Temperature</b>	-40		85	°C	non permanent



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