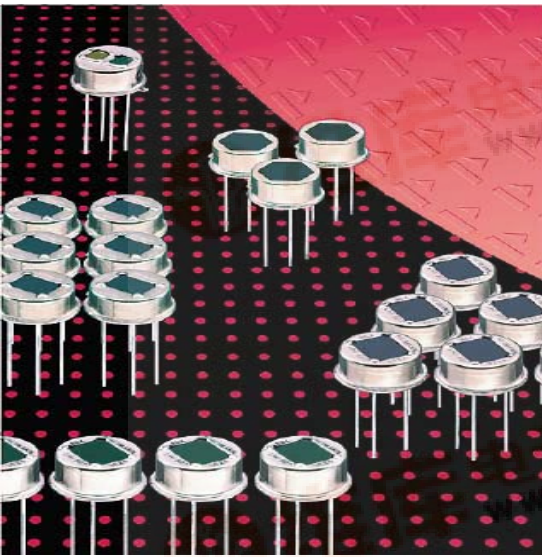


Pyroelectric Infrared Detectors

Quad Element Detector LHI 1148



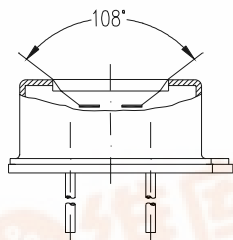
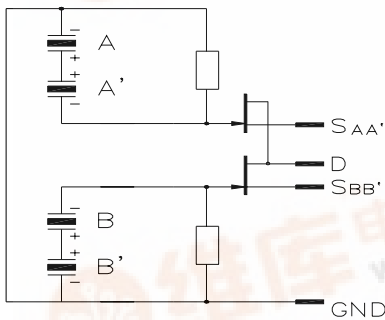
Four elements in two pairs

Two FET outputs, inverse polarity

Designed for redundant PIR alarms

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.

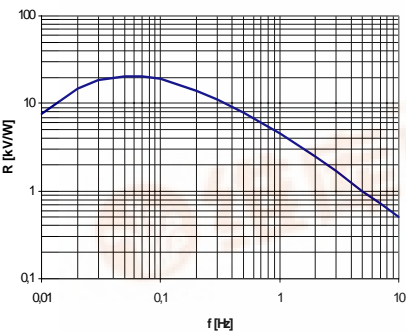
The **LHI 1148** detector is available in **TO-5** housing with standard infrared filter. It offers excellent common mode performance (match) and low noise.



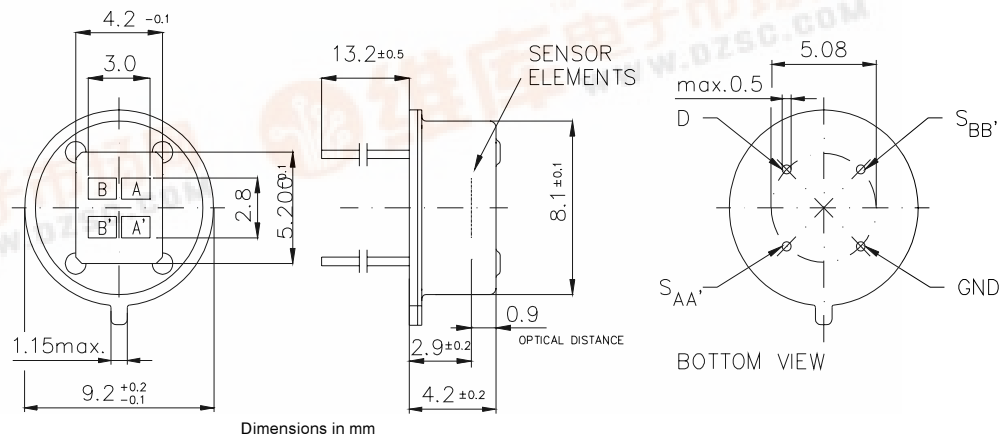
Field of View

Parameters	LHi 1148		units	condition
	min	typical		
Element size		1,375x1	mm ²	(4 elements)
Responsivity	3 500	4 500	V/W	100°C, 1 Hz
Match		1	%	
Noise		30	μVpp	25°C, 0,3...10Hz
Offset Voltage	0,2		V	R _s =47kΩ, 25°C
NEP		8,6x10 ⁻¹⁰	W √Hz	1Hz Bw, 100°C, 1 Hz
D*	5x10 ⁷	14x10 ⁷	cm √Hz/W	1Hz Bw, 100°C, 1 Hz
Output Impedance		5	kΩ	R _s =47kΩ, 25°C
Operating Voltage	2		V	R _s =47kΩ, 25°C
Field of View, horizontal		108°		unobstructed
vertical		67°		unobstructed
Operating Temp.	-40		°C	non permanent
Storage Temperature	-40		°C	non permanent

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Frequency Response



Dimensions in mm

