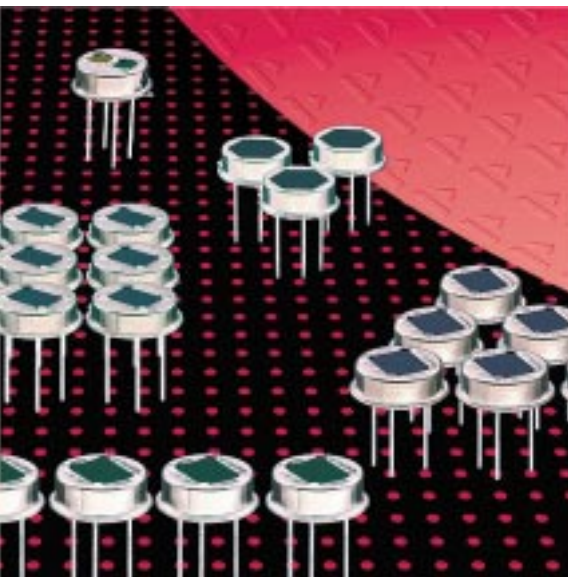


Pyroelectric Infrared Detectors

# Single Element Detector LHi 907



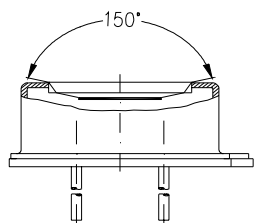
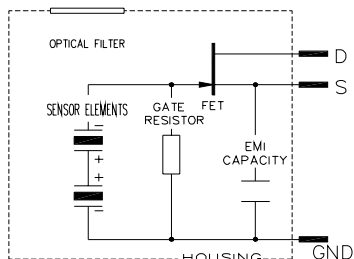
**Round element design with compensation**

**Single FET output**

**Designed for ceiling mount applications**

The **LHi 907** pyroelectric infrared-detector is a special design for motion control in ceiling mount applications. It includes a pyroelectric ceramic with a round sensitive element connected to one FET in source follower connection, and a compensational second element.

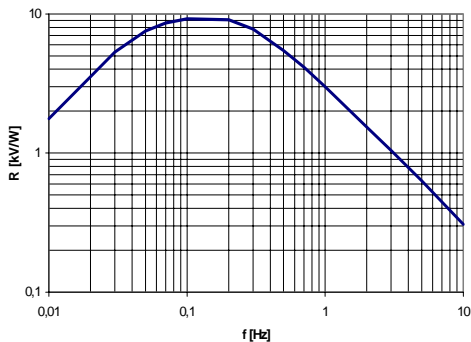
This detector is available in TO-5 housing with a standard infrared filter. It offers low noise, and special field of view and capture for ceiling mount applications.



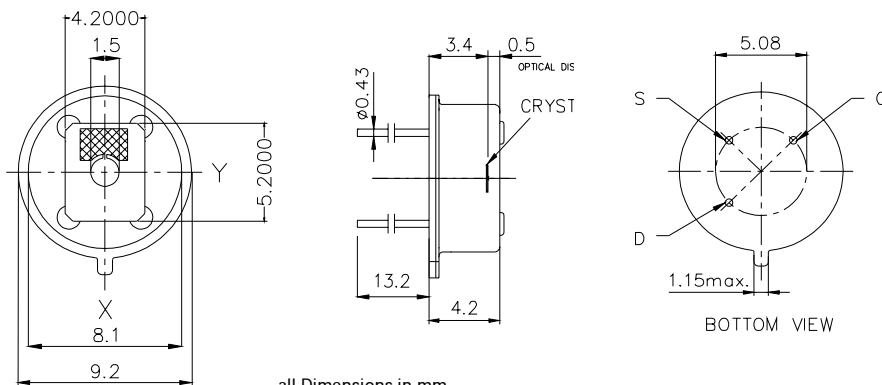
Field of View

Parameters	LHi 907			units	condition
	min	typical	max		
<b>Element size</b>	1,77			mm <sup>2</sup>	(1 element)
<b>Responsivity</b>	3300	4000		V/W	100°C, 1 Hz
<b>Noise</b>		20	50	µVpp	25°C, 0,3...10Hz
<b>Offset Voltage</b>	0,2		1,5	V	R <sub>s</sub> =47kΩ, 25°C
<b>NEP</b>		7,5x10 <sup>-10</sup>	23x10 <sup>-10</sup>	W √Hz	1Hz Bw, 100°C, 1 Hz
<b>D*</b>	6x10 <sup>7</sup>	19x10 <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		15	V	R <sub>s</sub> =47kΩ, 25°C
<b>Field of View, horizontal</b>		150°			unobstructed
<b>Field of View, vertical</b>		145°			unobstructed
<b>Operating Temp.</b>	-40		85	°C	non permanent
<b>Storage Temperature</b>	-40		85	°C	non permanent

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Frequency Response



all Dimensions in mm

Europe:  
**PerkinElmer** Optoelectronics GmbH  
 Wenzel Jaksch Str 31  
 Wiesbaden / Germany  
 Phone +49(0)611 492 0  
 Fax +49(0)611 492 170

USA:  
**PerkinElmer** Optoelectronics  
 2175 Mission College Blvd  
 Santa Clara, CA 95054  
 Phone +408 565 0830  
 Fax +408 565 0703

Asia:  
**PerkinElmer** Optoelectronics  
 47, Ayer Rajah Crescent #06-12  
 Singapore 139947  
 Phone +65 775 2022  
 Fax +65 775 1008

