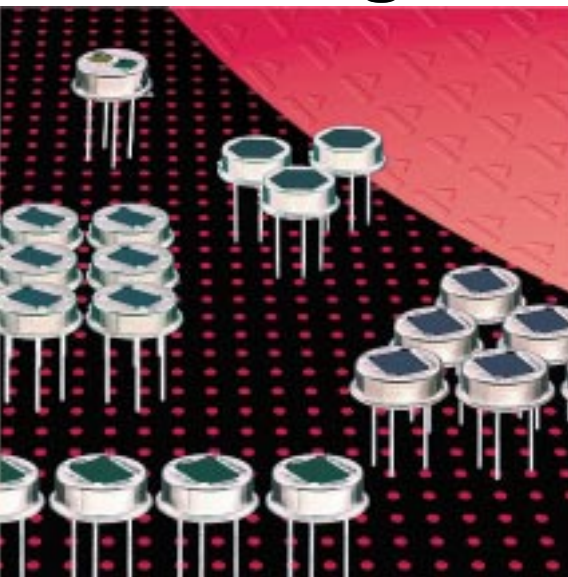


Pyroelectric Infrared Detectors

Single Element Detector LHi 807, 807TC



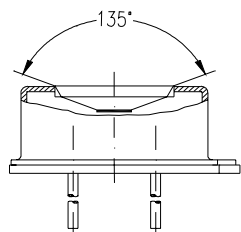
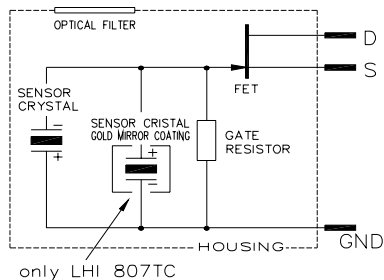
Element size 1,5x1,5

Thermally compensated option

Designed for Gas Analysis applications

The **LHi 807** pyroelectric infrared-detector series is specially designed for gas analysis and monitoring applications. It includes pyroelectric element with FET in source follower connection and is available with a second element shut from radiation for thermal compensation.

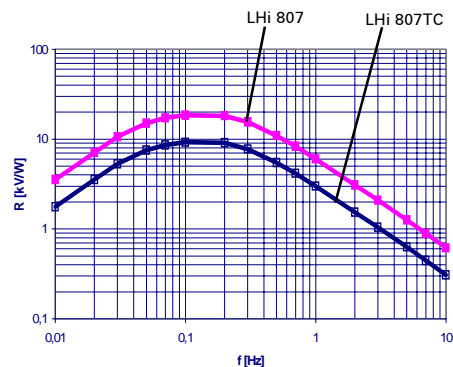
This detector is encapsulated into **TO-5** housing with an infrared window which acts as specific filter. There are many filters available for the selected spectral bandwidths, refer to catalogue envelope for the details.



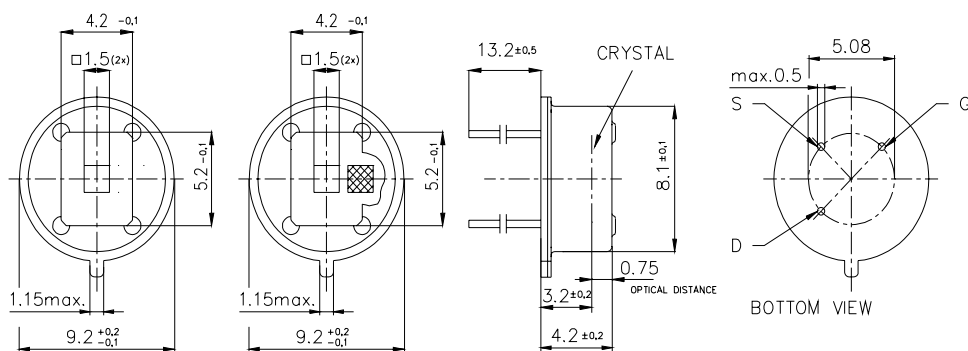
Field of View

Parameters	LHi 807/ 807TC		units	condition
	min	typical max		
Element size	1,5 x 1,5		mm ²	
Responsivity 807	500	640	V/W	100°C, 10 Hz
807TC	250	320	V/W	100°C, 10 Hz
Noise 807	600	1200	nV _{RMS}	25°C, 10Hz
807TC	300	600	nV _{RMS}	25°C, 10Hz
Offset Voltage	0,2	1,5	V	R _s =47kΩ, 25°C
NEP	9,4x10 ⁻¹⁰	24x10 ⁻¹⁰	W √Hz	1Hz Bw, 100°C, 1 Hz
D*	6x10 ⁷	16x10 ⁷	cm √Hz/W	1Hz Bw, 100°C, 1 Hz
Output Impedance	5	10	kΩ	R _s =47kΩ, 25°C
Operating Voltage	2	15	V	R _s =47kΩ, 25°C
Field of View, horizontal	135°		unobstructed	
vertical	120°		unobstructed	
Operating Temp.	-40	85	°C	non permanent
Storage Temperature	-40	85	°C	non permanent

Right for modification reserved / WS I, 27.12.2000



Frequency Response



Dimensions in mm

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