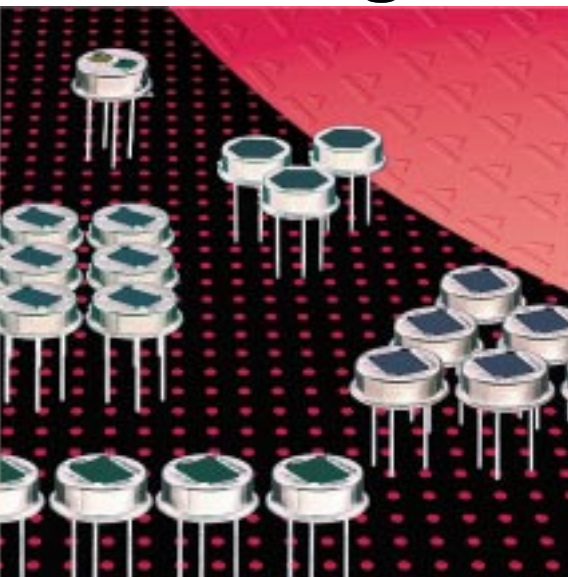


Pyroelectric Infrared Detectors

Single Element Detector LHi 808, 808TC



Element size 2x2

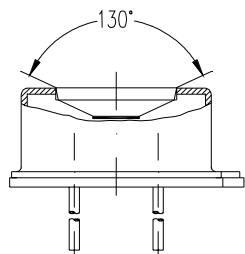
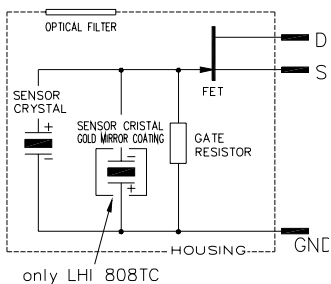
Thermally compensated option

Designed for Gas Analysis applications

The **LHi 808** pyroelectric infrared-detector series is designed for infrared measurement and gas analysis applications. It includes a pyroelectric element with FET in source follower connection. As TC version it includes thermal compensation by a special compensation element.

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

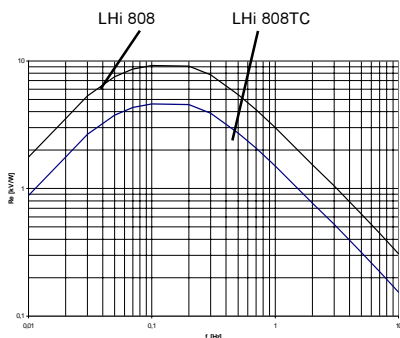
DATA SHEET



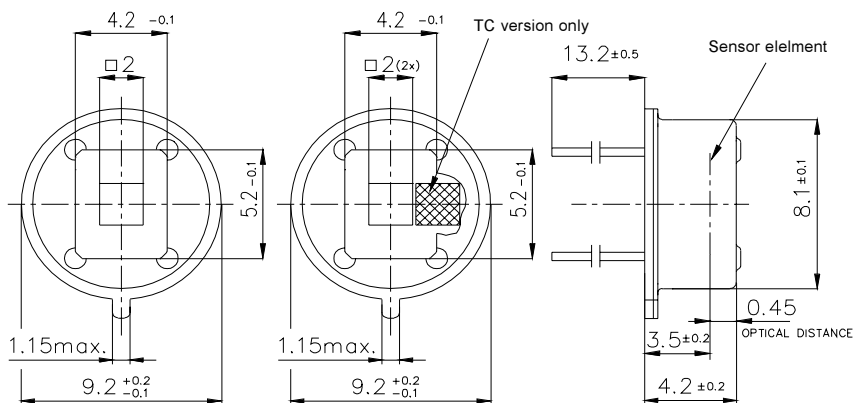
Field of View

Parameters	LHi 808/ 808TC		units	condition
	min	typical max		
Element size	2x2		mm ²	
Responsivity 808	210	300	V/W	100°C, 10 Hz
808TC	105	150	V/W	100°C, 10 Hz
Noise 808	300		nV _{RMS}	25°C, 10Hz
808TC	150		nV _{RMS}	25°C, 10Hz
Offset Voltage	0,2	1,5	V	R _s =47kΩ, 25°C
NEP	10x10 ⁻¹⁰ 28x10 ⁻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	130°			unobstructed
vertical	110°			unobstructed
Operating Temp.	-40 85		°C	non permanent
Storage Temperature	-40 85		°C	non permanent

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Frequency Response



Dimensions in mm

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