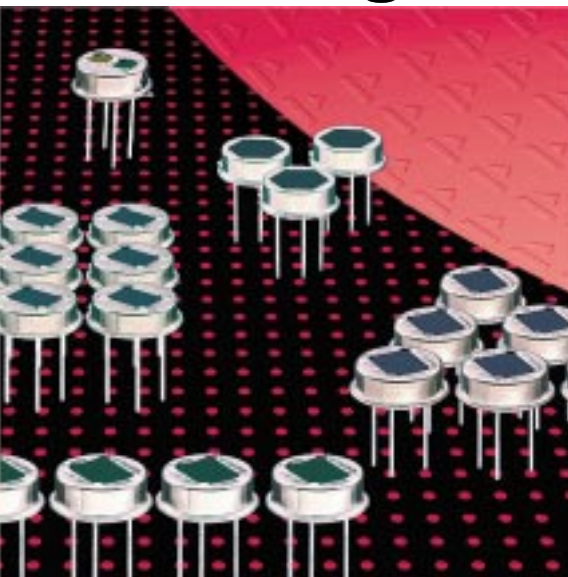


Pyroelectric Infrared Detectors

# Single Element Detector LHi 808, 808TC



**Element size 2x2**

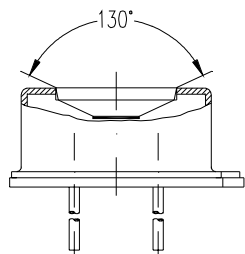
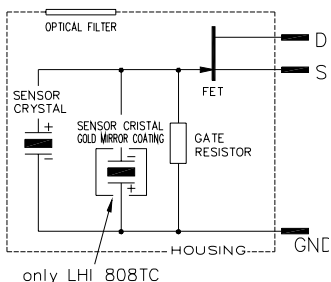
**Thermally compensated option**

**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.

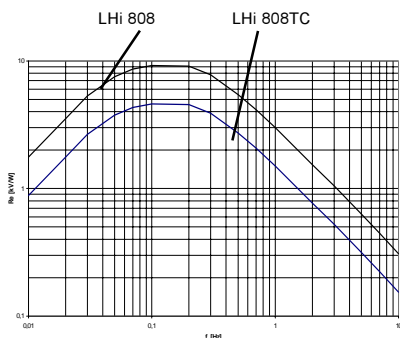
DATA SHEET



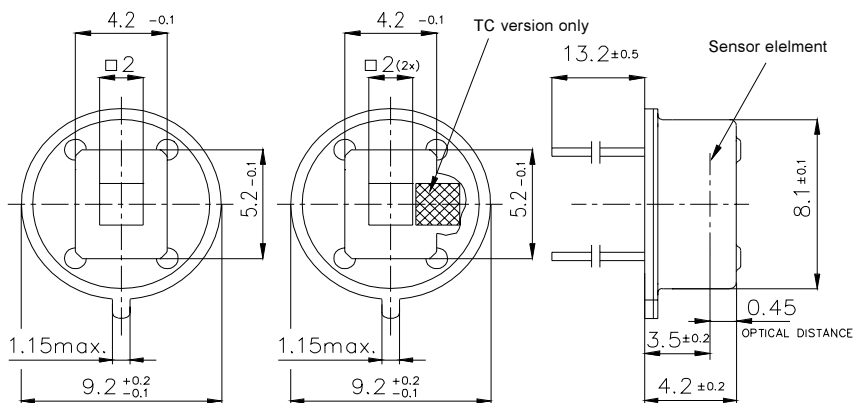
Field of View

Parameters	LHi 808/ 808TC		units	condition
	min	typical max		
<b>Element size</b>	2x2		mm <sup>2</sup>	
<b>Responsivity 808</b>	210	300	V/W	100°C, 10 Hz
<b>808TC</b>	105	150	V/W	100°C, 10 Hz
<b>Noise 808</b>	300		nV <sub>RMS</sub>	25°C, 10Hz
<b>808TC</b>	150		nV <sub>RMS</sub>	25°C, 10Hz
<b>Offset Voltage</b>	0,2	1,5	V	R <sub>s</sub> =47kΩ, 25°C
<b>NEP</b>	10x10 <sup>-10</sup>	28x10 <sup>-10</sup>	W √Hz	1Hz Bw, 100°C, 1 Hz
<b>D*</b>	6x10 <sup>7</sup>	16x10 <sup>7</sup>	cm √Hz/W	1Hz Bw, 100°C, 1 Hz
<b>Output Impedance</b>	5		kΩ	R <sub>s</sub> =47kΩ, 25°C
<b>Operating Voltage</b>	2		V	R <sub>s</sub> =47kΩ, 25°C
<b>Field of View, horizontal</b>	130°			unobstructed
<b>vertical</b>	110°			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



Dimensions in mm

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