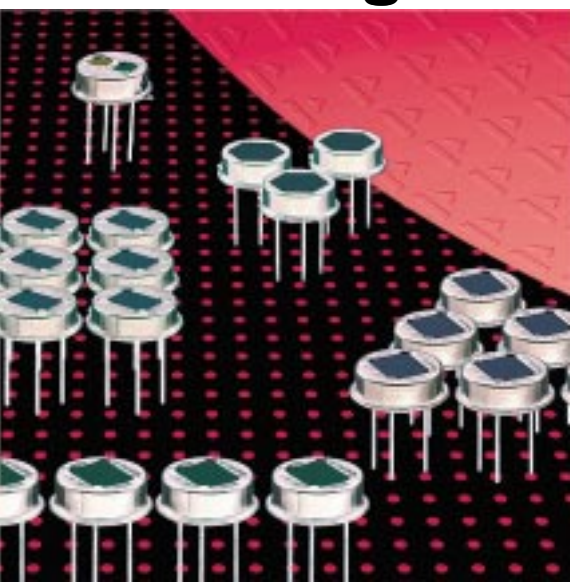
DATASHEET

Single Element Detector LHi 808, 808TC



Element size 2x2

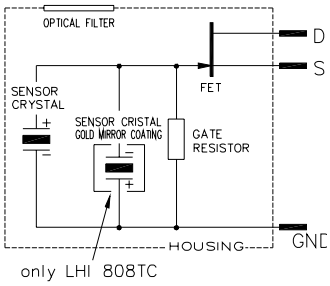
Thermally compensated option

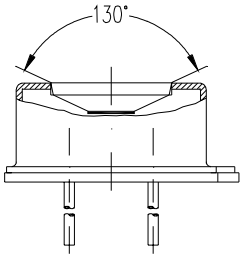
Designed for Gas Analysis applications

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.

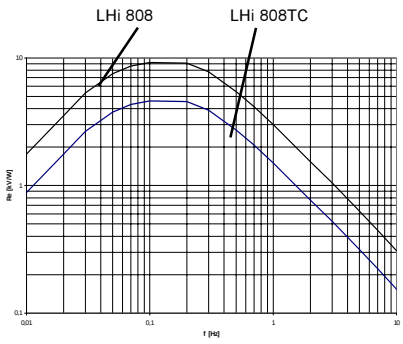
This detector is encapsulated into **TO-5** housing with an infrared window, which acts as specific filter.There are many narrow band filters available for the selected spectral bandwidths. For details about filters refer to catalogue envelope.

Parameters		LHi 808/ 808TC				
		min	typical	max	units	condition
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	600	nV_{RMS}	25°C, 10Hz
	808TC		150	300	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

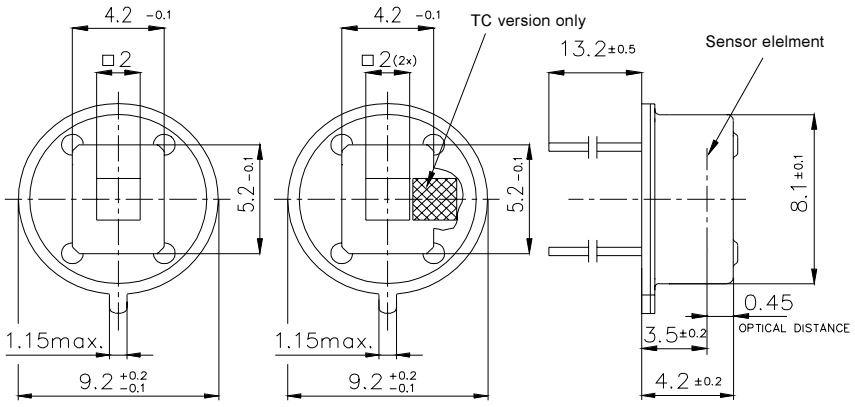




Field of View



Frequency Response



Dimensions in mm

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