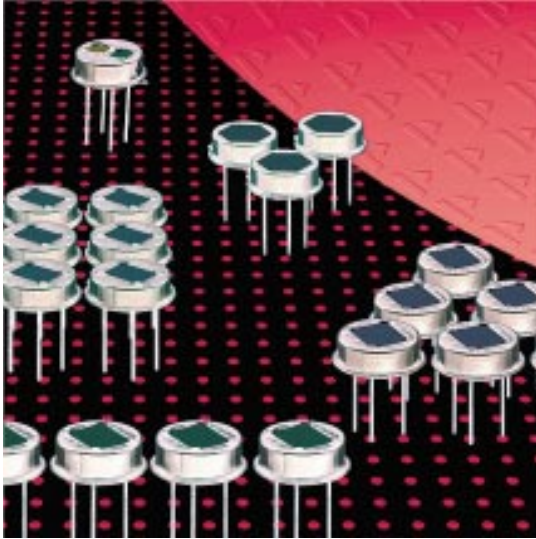


Pyroelectric Infrared Detectors

Dual Element Detectors LHi 874, LHi 878



TO-39 / TO-5 housing

Competitive cost version

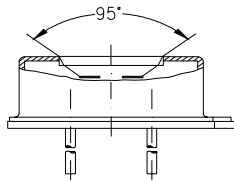
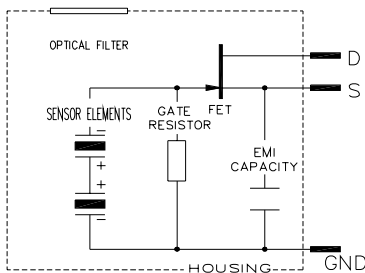
Designed for motion control

The **LHi 874** and **LHi 878** pyroelectric infrared-detector series are the standard dual element design recommended for all variants of motion control. They include a dual element pyro-electric ceramic with FET in source follower connection.

The **LHi 874** is available as **TO-39**, whereas **LHi 878** detector is available in **TO-5** housing with standard infrared filter. They both offer high responsivity with excellent common mode performance (match) and low noise at steady state and temperature changes.

For both variants RF improved options are available.

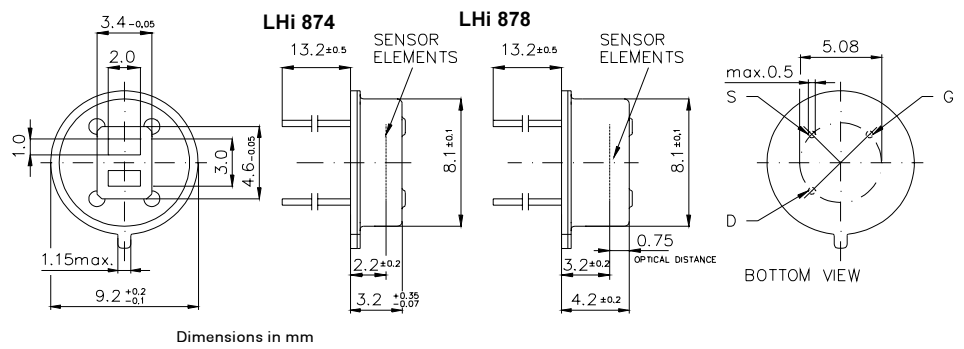
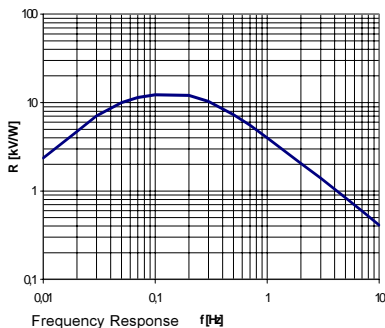
DATASHEET



Field of View

Parameters	LHi 874/ 878				
	min	typical	max	units	condition
Element size		2x1		mm ²	(2 elements)
Responsivity	3 300	4000		V/W	100°C, 1 Hz
Match		1	10	%	
Noise		20	50	µVpp	25°C, 0,3...10Hz
Offset Voltage	0,2		1,55	V	R _s =47kΩ, 25°C
NEP		7,5x10 ⁻¹⁰	28x10 ⁻¹⁰	W √Hz	1Hz Bw, 100°C, 1 Hz
D*	5x10 ⁷	19x10 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, vertical		95		°	unobstructed
horizontal		90		°	unobstructed
Operating Temperature	-40		85	°C	non permanent
Storage Temperature	-40		85	°C	non permanent

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