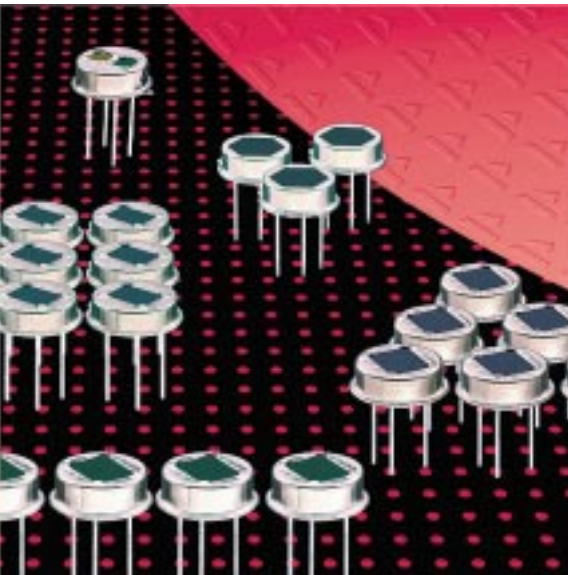


Pyroelectric Infrared Detectors

# Dual Element Detectors LHi 874, LHi 878



**TO-39 / TO-5 housing**

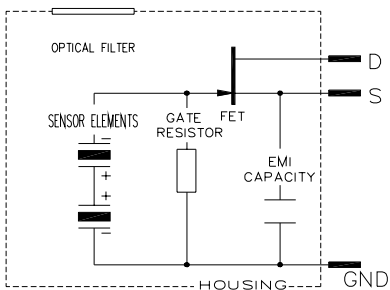
**Competitive cost version**

**Designed for motion control**

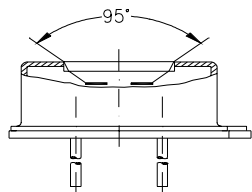
The **LHi 874** and **LHi 878** pyroelectric infrared-detector series are the standard dual element design recommended for all variants of motion control. They include a dual element pyro-electric ceramic with FET in source follower connection.

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.

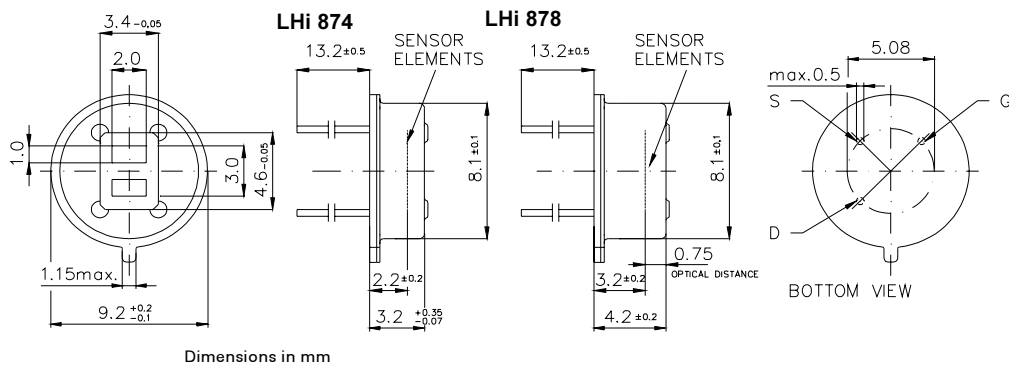
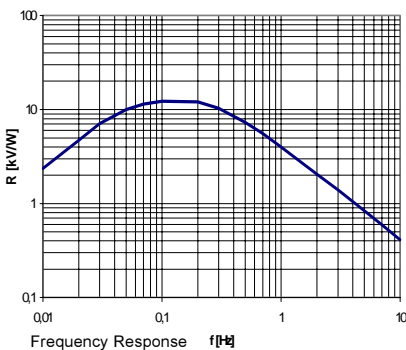


Parameters	LHi 874/ 878			
	min	typical	max	units condition
<b>Element size</b>	2x1		mm <sup>2</sup>	(2 elements)
<b>Responsivity</b>	3 300	4000	V/W	100°C, 1 Hz
<b>Match</b>	1 10		%	
<b>Noise</b>	20 50		µVpp	25°C, 0,3...10Hz
<b>Offset Voltage</b>	0,2	1,55	V	R <sub>S</sub> =47kΩ, 25°C
<b>NEP</b>	7,5x10 <sup>-10</sup>	28x10 <sup>-10</sup>	W √Hz	1Hz Bw, 100°C, 1 Hz
<b>D*</b>	5x10 <sup>7</sup>	19x10 <sup>7</sup>	cm √Hz/W	1Hz Bw, 100°C, 1 Hz
<b>Output Impedance</b>	5 10		kΩ	R <sub>S</sub> =47kΩ, 25°C
<b>Operating Voltage</b>	2 15		V	R <sub>S</sub> =47kΩ, 25°C
<b>Field of View, vertical</b>	95		°	unobstructed
<b>Field of View, horizontal</b>	90		°	unobstructed
<b>Operating Temperature</b>	-40	85	°C	non permanent
<b>Storage Temperature</b>	-40	85	°C	non permanent



Field of View

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