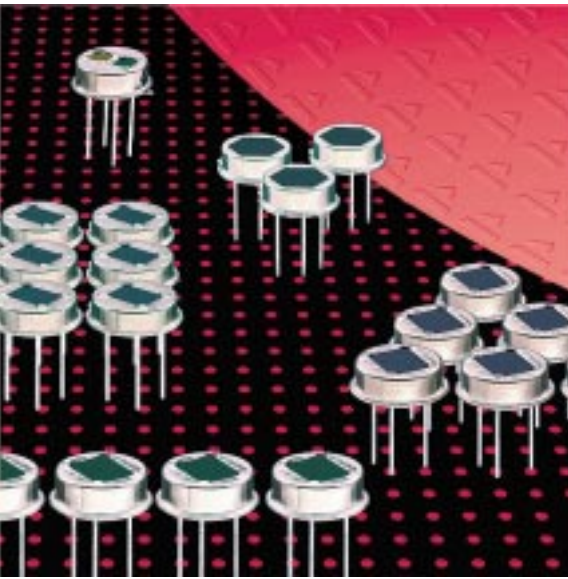


Pyroelectric Infrared Detectors

Dual Element Detectors LHi 874, LHi 878



TO-39 / TO-5 housing

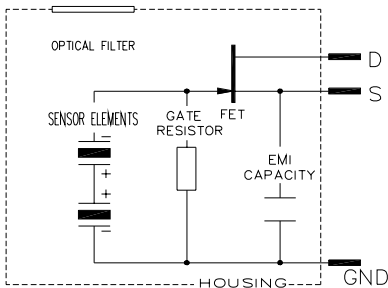
Competitive cost version

Designed for motion control

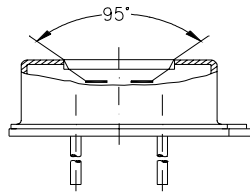
The **LHi 874** and **LHi 878** pyroelectric infrared-detector series are the standard dual element design recommended for all variants of motion control. They include a dual element pyro-electric ceramic with FET in source follower connection.

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.

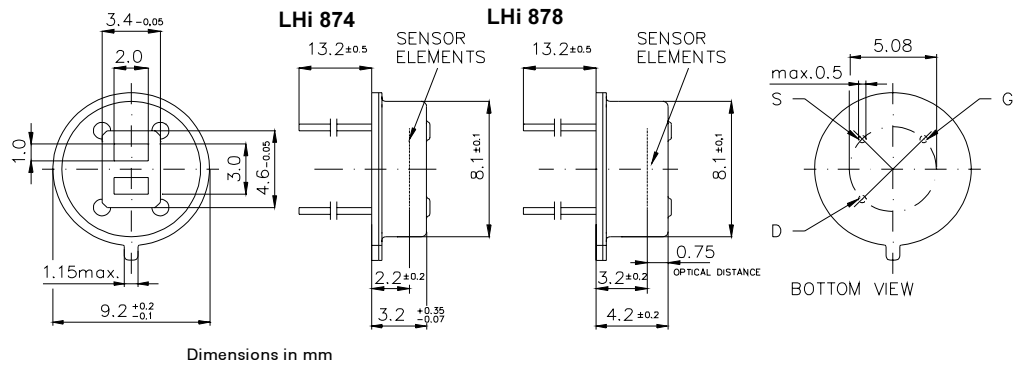
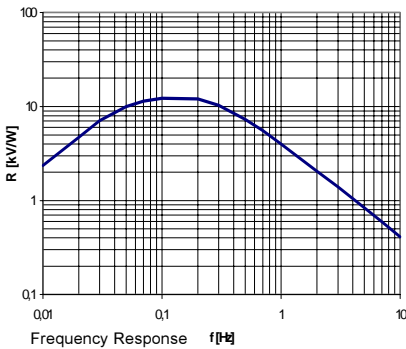


Parameters	LHi 874/ 878			
	min	typical	max	units condition
Element size	2x1		mm ²	(2 elements)
Responsivity	3 300	4000	V/W	100°C, 1 Hz
Match	1 10		%	
Noise	20 50		µVpp	25°C, 0,3...10Hz
Offset Voltage	0,2	1,55	V	R _S =47kΩ, 25°C
NEP	7,5x10 ⁻¹⁰	28x10 ⁻¹⁰	W √Hz	1Hz Bw, 100°C, 1 Hz
D*	5x10 ⁷	19x10 ⁷	cm √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



Field of View

Right for modification reserved / WS / 29.6.2001



Europe:
PerkinElmer Optoelectronics GmbH
 Wenzel Jaksch Str 31
 Wiesbaden / Germany
 Phone +49(0)611 492 0
 Fax +49(0)611 492 170

USA:
PerkinElmer Optoelectronics
 2175 Mission College Blvd
 Santa Clara, CA 95054
 Phone +408 565 0830
 Fax +408 565 0703

Asia:
PerkinElmer Optoelectronics
 47, Ayer Rajah Crescent #06-12
 Singapore 139947
 Phone +65 775 2022
 Fax +65 775 1008

