

Dual Element Detectors

LHi 944

TO-39 housing

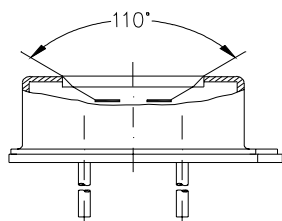
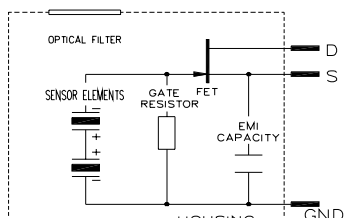
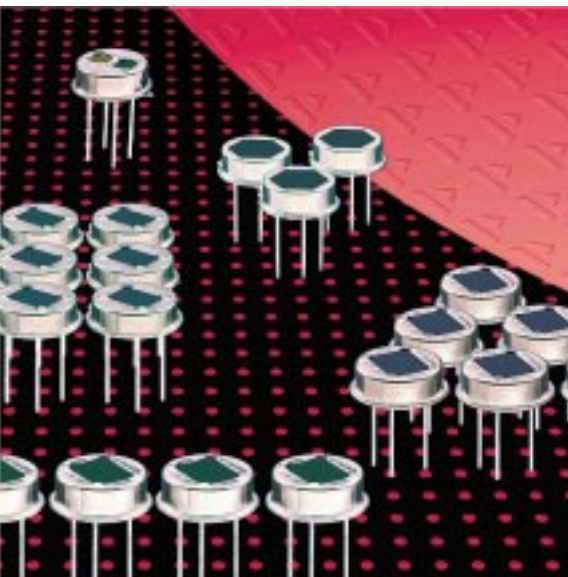
Wide field of view

Designed for motion control

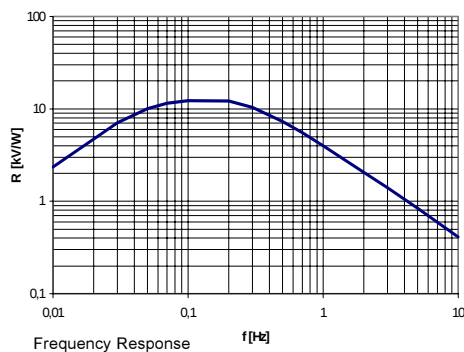
RF Protection

The **LHi 944** pyroelectric infrared-detector series represents a special dual element design recommended for motion control with extended Field of view. They include a dual element pyroelectric ceramic with FET in source follower connection, and RF protection by additional capacitor.

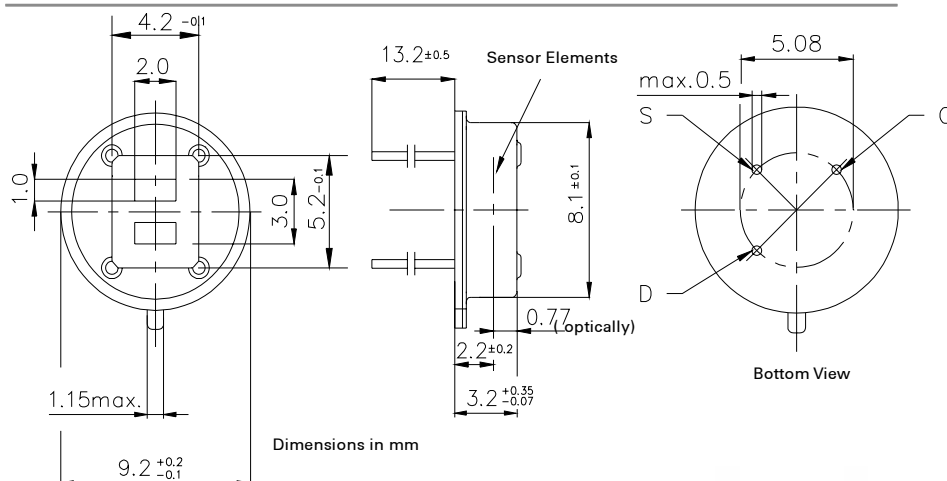
The **LHi 944** is available as **TO-39** housing with standard infrared filter. It offers high responsivity with excellent common mode performance (match) and low noise at steady state and temperature changes.



Field of View



Parameters	LHi 944				
	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



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