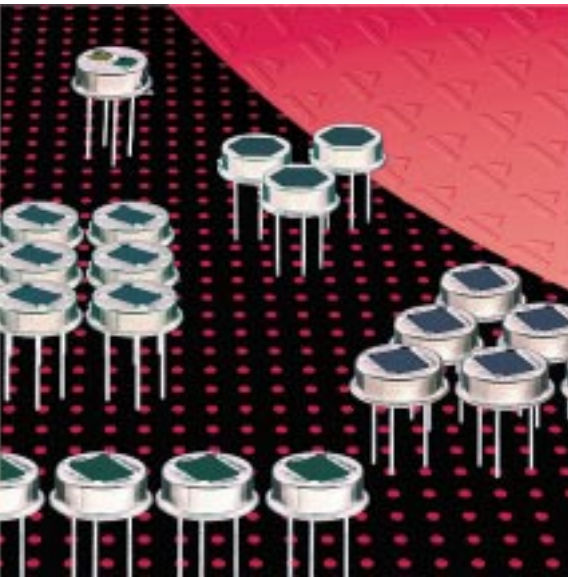


Pyroelectric Infrared Detectors

**Dual Element Detectors LHi 944**



**TO-39 housing**

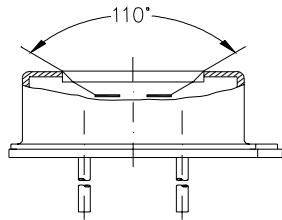
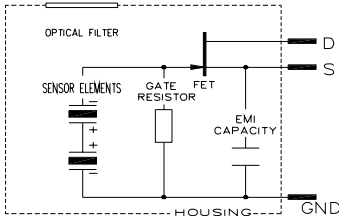
**Wide field of view**

**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.

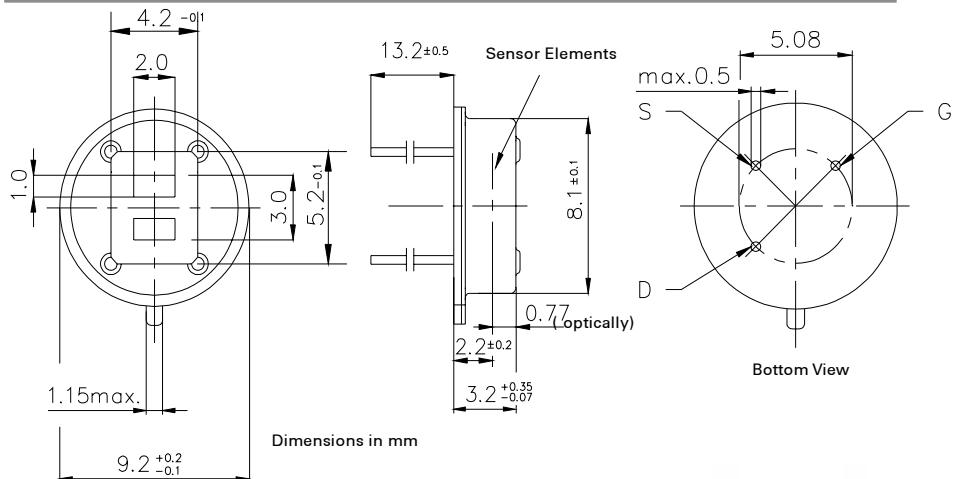
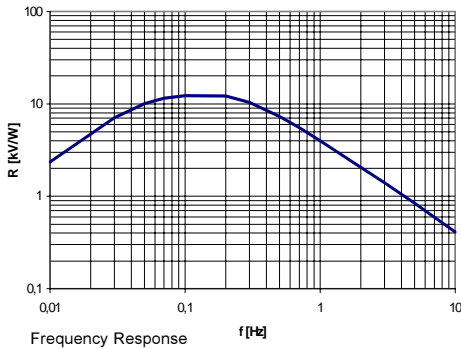
The **LHi 944** is available as **TO-39** housing with standard infrared filter. It offers high responsivity with excellent common mode performance (match) and low noise at steady state and temperature changes.



Field of View

Parameters	LHi 944			
	min	typical	max	units condition
<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>horizontal</b>		90		° unobstructed
<b>Operating Temperature</b>	-40		85	°C non permanent
<b>Storage Temperature</b>	-40		85	°C non permanent

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