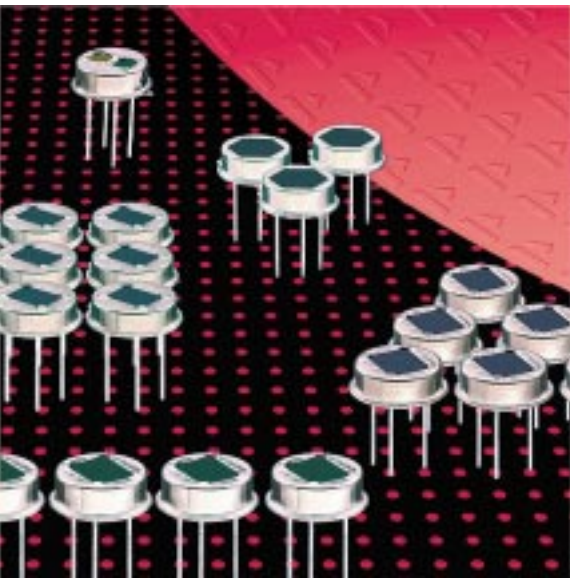
Dual Element Detector LHi 333



Dual Element Detector

Special Flat Pack Housing

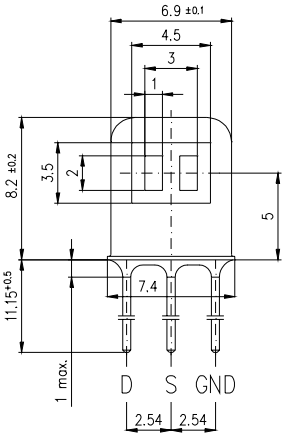
Designed for Multi-Sensor Arrangements

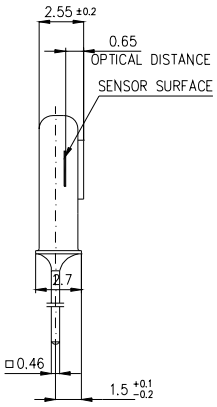
The **LHi 333** pyroelectric infrared-detector series is specially designed for Light switching applications with many detectors working in parallel for a wide field of view. It includes a dual element pyroelectric ceramic element with FET in source follower connection.

This detector is fit with an infrared filter 5...14 µm. It offers high responsivity with excellent common mode performance (match) and low noise.

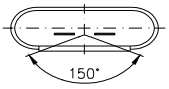
Parameters	LHi 333				
	min	typical	max	units	condition
Element size		2 x 1		mm^2	(2 elements)
Responsivity	3 300	3800		V/W	100°C, 1 Hz
Match		1	10	%	
Noise		20	50	µVpp	25°C, 0,3...10Hz
Offset Voltage	0,2		1,55	V	R_S =47kΩ, 25°C
NEP		$7{,}5 \times 10^{-10}$	28×10^{-10}	W √Hz	1Hz Bw, 100°C, 1 Hz
D*	5×10^{7}	19×10^{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, horizontal		100°			unobstructed
vertical		100°			unobstructed
Operating Temperature	-40		75	°C	non permanent
Storage Temperature	-40		80	°C	non permanent

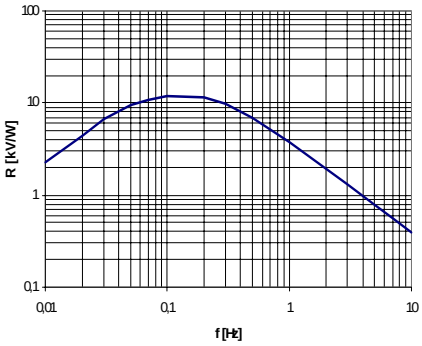
Field of View





Dimensions in mm





Frequency Response

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