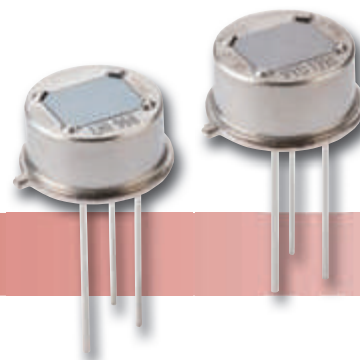


Pyroelectric, Dual-Element Detectors For Intrusion Alarms



LHi 968, PYD 1398 – High-End Pyro

Applications

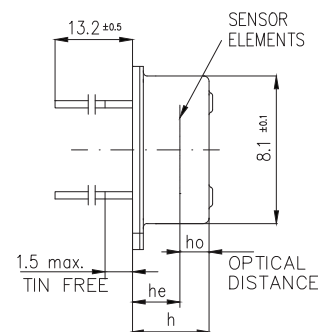
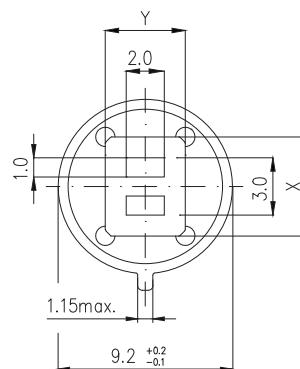
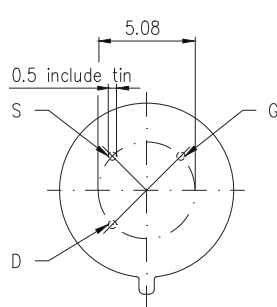
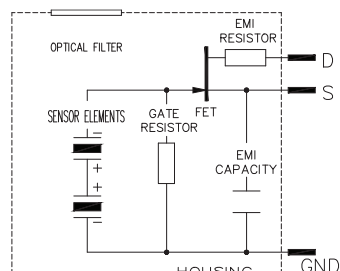
- Intrusion Alarms
- High-end Motion Sensors

Features and Benefits

- TO-5 metal housing
- Improved EMI protection
- Reduced (WLI)

Product Description

The analog LHi 968 series with Dual Element configuration is performance-proven top of the line product in high-end applications. The LHi 968 design provides for a reduced sensitivity to EMI and excellent White Light Immunity (WLI). PYD 1398 offers a higher level of RF immunity and is optionally available with grading for lower white light sensitivity.



LHi 968 and PYD 1398

Parameter	Symbol	LHi 968	PYD 1398	Unit	Remarks
Responsivity, min.	R_{min}	3,3	3,3	kV/W	$f = 1 \text{ Hz}$
Responsivity, typ.	R	4	4	kV/W	$f = 1 \text{ Hz}$
Match, max.	M_{max}	10	10	%	
Noise, max.	N_{max}	50	50	μV_{pp}	0,4...10Hz/20°C
Noise, typ.	N	20	20	μV_{pp}	0,4...10Hz/20°C
spec. Detectivity	D^*	19	19	$10^7 \text{ cm}^2/\text{Hz/W}$	1Hz / 1Hz BW/20°C
Field of View, horizontal	FoV	100°	100°		unobstructed
Field of View, vertical		100°	100°		unobstructed
Source Voltage		0,2...1,5	0,2...1,5	V	47 kΩ, 20°C, VDD=10V
Operating Voltage		2,0...10	2,0...10	V	47 kΩ, 20°C
EMI performance		**	**		
White Light performance		**	***		Excelitas test set up
Height	h	4,2	4,2	mm	
Optical Element Location	he / ho	2,6 / 0,95	2,6 / 0,95	mm	
Filter Size	$X \times Y$	5,2 x 4,2	5,2 x 4,2	mm	