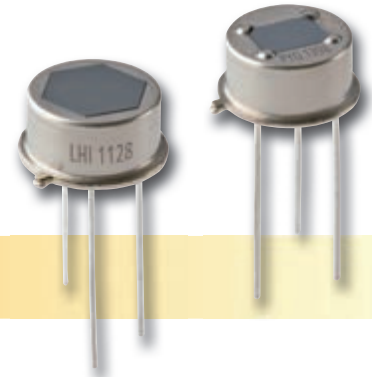


Pyroelectric Four-Element Detectors For Ceiling-Mount



LHi 1128, PYQ 1398, PYQ 1348 – Single-Output Quad Pyro

Target Applications

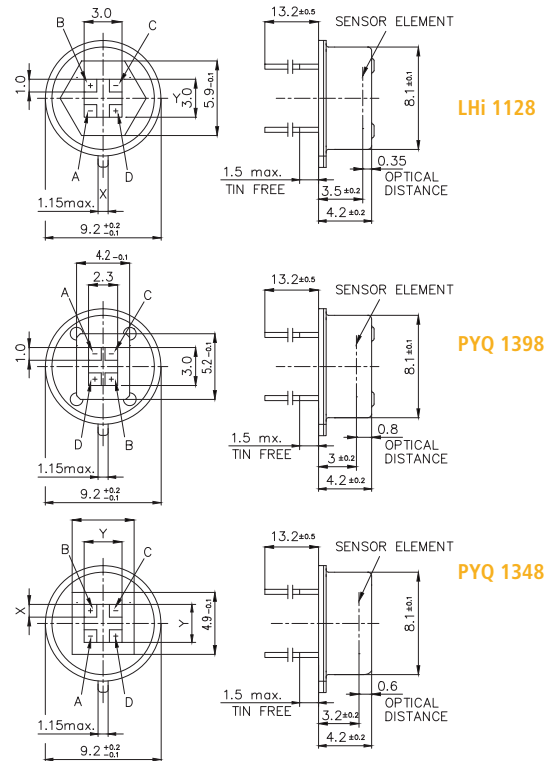
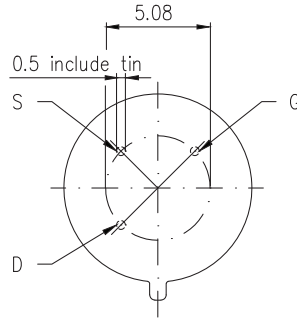
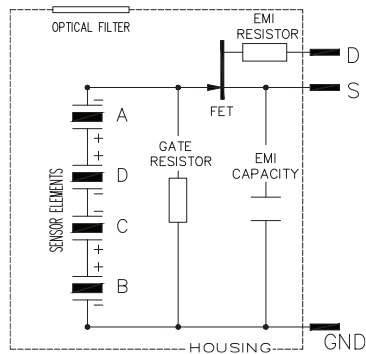
- Ceiling-Mount Alarms
- Ceiling-Mount Light Switch

Features and Benefits

- TO-5 metal housing
- Different window sizes
- Single Channel output

Product Description

This series of four element “Quad” Detectors provides all four elements connected to one common output. This configuration enables specific applications in ceiling-mount location when applied with suitable lens or mirror optics designs. Two different window options are provided: Large window or standard rectangular window size. Various element polarities available upon request. For better EMI protection, the built-in capacitor option is available. For small fresnellens applications a smaller element configuration is provided.



LHi 1128, PYQ 1398 and PYQ 1348

Parameter	Symbol	LHi 1128	PYQ 1398	PYQ 1348	Small Element Option	Unit	Remarks
Responsivity, min.	R_{min}	5,4	5,4	5,4	8,4	kV/W	f = 1 Hz
Responsivity, typ.	R	6,5	6,5	6,5	10,1	kV/W	f = 1 Hz
Match, max.	M_{max}	10	15	15	15	%	
Noise, max.	N_{max}	100	100	100	125	μV_{pp}	0,4...10Hz/20°C
Noise, typ.	N	30	40	40	50	μV_{pp}	0,4...10Hz/20°C
spec. Detectivity	D^*	8	14	14	17	$10^7 cm^* \sqrt{Hz/W}$	1Hz/ 1Hz BW
Field of View, horizontal	FoV	156°	103°	124°	129°		unobstructed
Field of View, vertical		125°	97°	124°	129°		unobstructed
Source Voltage		0,2...1,55	0,2...1,55	0,2...1,55	0,2...1,55	V	47 kΩ, 20°C, VDD=10V
Operating Voltage		2,0...10	2,0...10	2,0...10	2,0...10	V	47 kΩ, 20°C
EMI performance	**	**	**	**	**	**	**
Element size/spacing		1 x 1/1	1 x 1/1	1 x 1/1	0,8 x 0,8/0,8		