

PYROELECTRIC FOUR ELEMENT DETECTORS FOR CEILING MOUNT

PYROELECTRIC DETECTORS FOR MOTION SENSING ■



LHi 1128, PYQ 1398

Applications

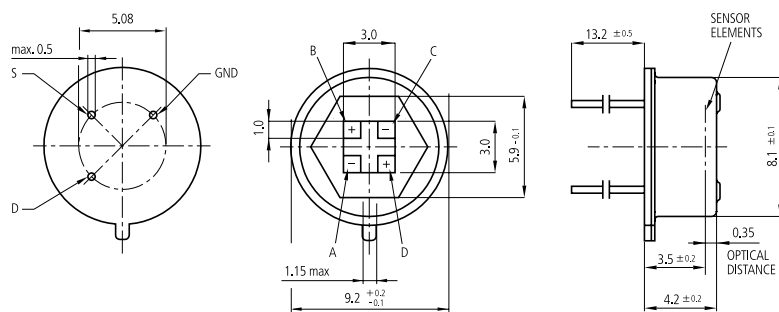
- Ceiling mount alarms
- Ceiling mount light switch

Features and Benefits

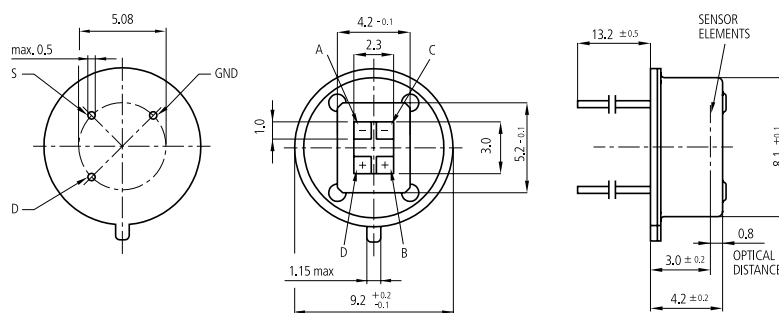
- TO-5 metal housing
- Different window sizes
- Single channel output

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. For better EMI protection, the built-in capacitor option is available.

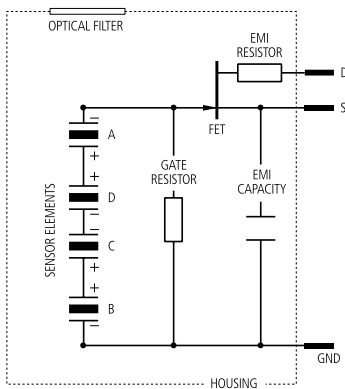


LHi 1128



PYQ 1398

All dimensions in mm



LHi 1128, PYQ 1398

Parameter	Symbol	LHI 1128	PYQ 1398	Unit	Remark
Responsivity, min.	R_{min}	5.4	5.4	kV/W	$f = 1 \text{ Hz}$
Responsivity, typ.	R	6.5	6.5	kV/W	$f = 1 \text{ Hz}$
Match, max.	M_{max}	10	15	%	
Noise, max.	N_{max}	100	100	μV_{pp}	0.4... 10 Hz / 20° C
Noise, typ.	N_{typ}	30	40	μV_{pp}	0.4... 10 Hz / 20° C
Spec. detectivity	D^*	8	14	$10^7 \text{ cm}^* \sqrt{\text{Hz/W}}$	1 Hz / 1 Hz BW / 20° C
Field of view, horizontal	FoV	156°	103°		Unobstructed
Field of view, vertical	FoV	125°	97°		Unobstructed
Source voltage		0.2 - 1.55	0.2 - 1.55	V	47 k Ω / 20° C / 5 V
Operating voltage		2.0 ... 12	2.0 ... 12	V	47 k Ω / 20° C