

MINIATURIZED DUAL ELEMENT PYRODETECTORS FOR MOTION SENSING

PYROELECTRIC DETECTORS FOR MOTION SENSING ■



PYD 5131 – Analog Pyro

Applications

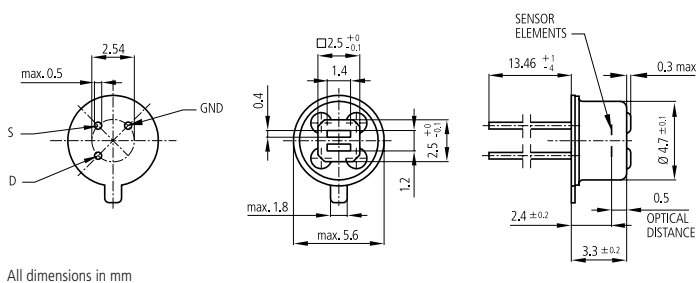
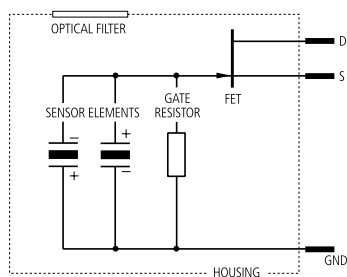
- Auto light switch
- Wall switch

Features and Benefits

- TO-46 metal housing

Product Description

This range of pyrodetectors features a miniaturized Dual Element pyro in TO-46 housing. The small housing in connection with a reduced element size and spacing provides potential for reduced-size optics and thus smaller, more discrete, motion detection unit designs.



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Main Parameter	Symbol	PYD 5131	Unit	Remark
Responsivity, min.	R_{min}	9.0	kV/W	$f = 1 \text{ Hz}$
Responsivity, typ.	R_{typ}	12.3	kV/W	$f = 1 \text{ Hz}$
Match, max.	M_{max}	10	%	
Noise, max.	N_{max}	180	μV_{pp}	0.4...10 Hz / 20° C
Noise, typ.	N_{typ}	75	μV_{pp}	0.4...10 Hz / 20° C
Source voltage		0.2 ... 1.5	V	47 k Ω / 20° C / 5 V
Field of view, horizontal	FoV	99°		Unobstructed
Field of view, vertical	FoV	88°		Unobstructed
Operating voltage		2.0 ... 12.0	V	47 k Ω / 20° C