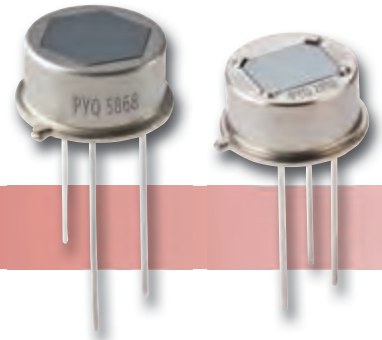


# Digital Pyrodetector

## Digital Pyrodetector Quad designs



PYQ 5868, PYQ 5848, PYQ 2898 (2+1) Channel Quad Element *DigiPyro*®

### Target Applications

- Intrusion Alarms
- Ceiling-Mount Sensors

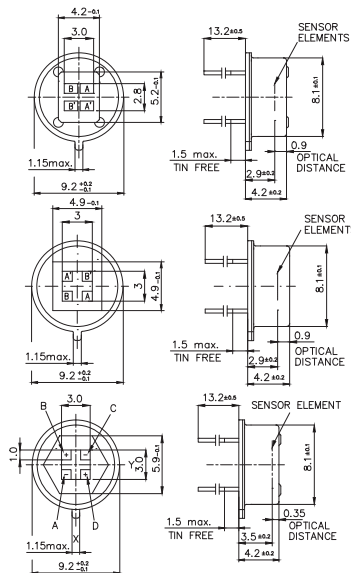
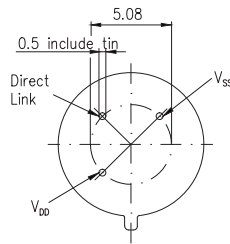
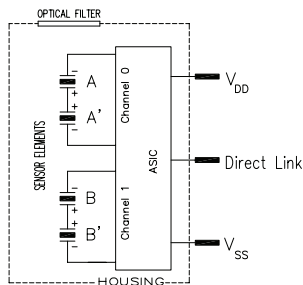
### Features and Benefits

- DigiPyro Concept
- Two independent sensing channels
- Integrated temperature reference

### Product Description

This PYQ family features 3 different „Quad“ configurations, which is the polarity, spacing and arrangement of the four sensing elements. All versions have in common the dual output channels which always combine two sensing elements in series connection to one channel output. In addition, a temperature reference output is provided, making the total output bit stream as 3x14 bit.

All types are offered only in TO-5 metal housing. Depending on element spacing and window size, the 3 versions offer different field of view. Custom variations of element designs are also possible.



PYQ 2898

PYQ 5848

PYQ 5868

### PYQ 2898, PYQ 5848 and PYQ 5868

Main Parameter	Symbol	PYQ 2898	PYQ 5848	PYQ 5868	Unit	Remarks
Responsivity	R	4,5	8	8	kV/W	f = 1 Hz
Responsivity, min	R <sub>min</sub>	3,5	6	6	%	
Match	M	10	10	10	%	
Noise	N	30	40	40	V	
Noise, max	N <sub>max</sub>	100	100	100	µA	
Field of View, vertical	FoV <sub>v</sub>	100°	95°	115°		unobstructed
Field of View, horizontal	FoV <sub>h</sub>	65°	95°	100°		unobstructed
Operation Data for all		Min	Typ	Max		
Operating Voltage	V <sub>DD</sub>	2,5		3,6	V	
Supply Current	I <sub>DD</sub>		10	18	µA	V <sub>DD</sub> = 3,3V, no load
ADC Data						
ADC Resolution,	Channel 2+1		3x 14		Bits	For each channel, MSB first
PIR ADC Sensitivity		6,0	6,5	7,1	µV/Count	
ADC Output Offset		7000	8192	9200	Counts	
Sample Time	t <sub>SMP</sub>	2			ms	