

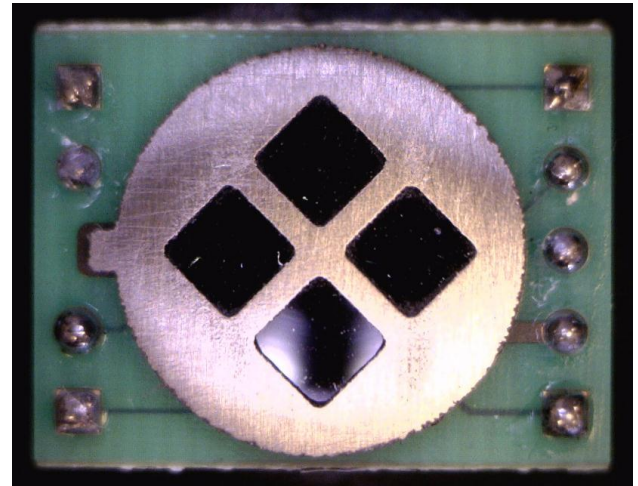
# PYREOS

## NEW LOW PROFILE FORMAT QUAD CHANNEL GAS DETECTOR

**New product**

### Introduction

Pyreos introduces a revolutionary change in format with a low profile four channel pyroelectric gas detector enclosed on a pcb substrate. The low profile package provides new possibilities in product design. When coupled with the high performance of the four large sensor pixels and filter apertures, this offers an attractive new approach to miniaturised, high performance multi-gas sensing. The new product maintains Pyreos' uniquely high standards of performance, stability, and EMC protection. Custom surface mount compatible versions of this product can be designed for each customer.

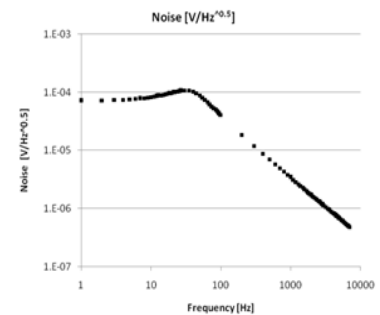
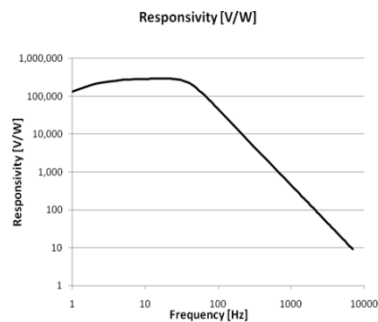
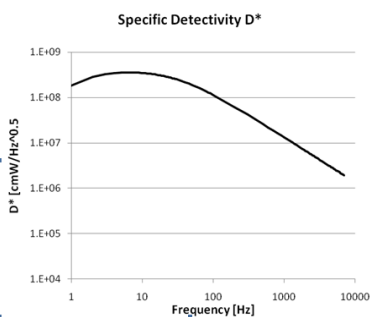


### Sensor Information (Nominal)

Filter aperture	3 mm square
Element size	1650 $\mu\text{m}$ x 1650 $\mu\text{m}$
Op amp with 10G Ohm feedback resistor	
Time Constant	~12 ms
Responsivity <sup>1</sup>	<b>130,000 V/W</b>
D* <sup>1</sup>	<b><math>3.5 \times 10^8 \text{ cm}\sqrt{\text{Hz}}/\text{W}</math></b>
Noise (mean) <sup>1</sup>	<b>100 <math>\mu\text{V}\sqrt{\text{Hz}}</math></b>
<sup>1</sup> 10Hz normalized without window & optics	

Max. Voltage	5.5V
Min. Voltage	2.4V
Output Voltage	Normalised around mid rail
Microphonics	S <sub>vib</sub> ~2 $\mu\text{V}/\text{g}$ at 10Hz
Packages	PTH or Surface mount
Filter Options	Customer combinations
Operating Temperature -20 to +70 C	
Storage Temperature -20 to +110 C	

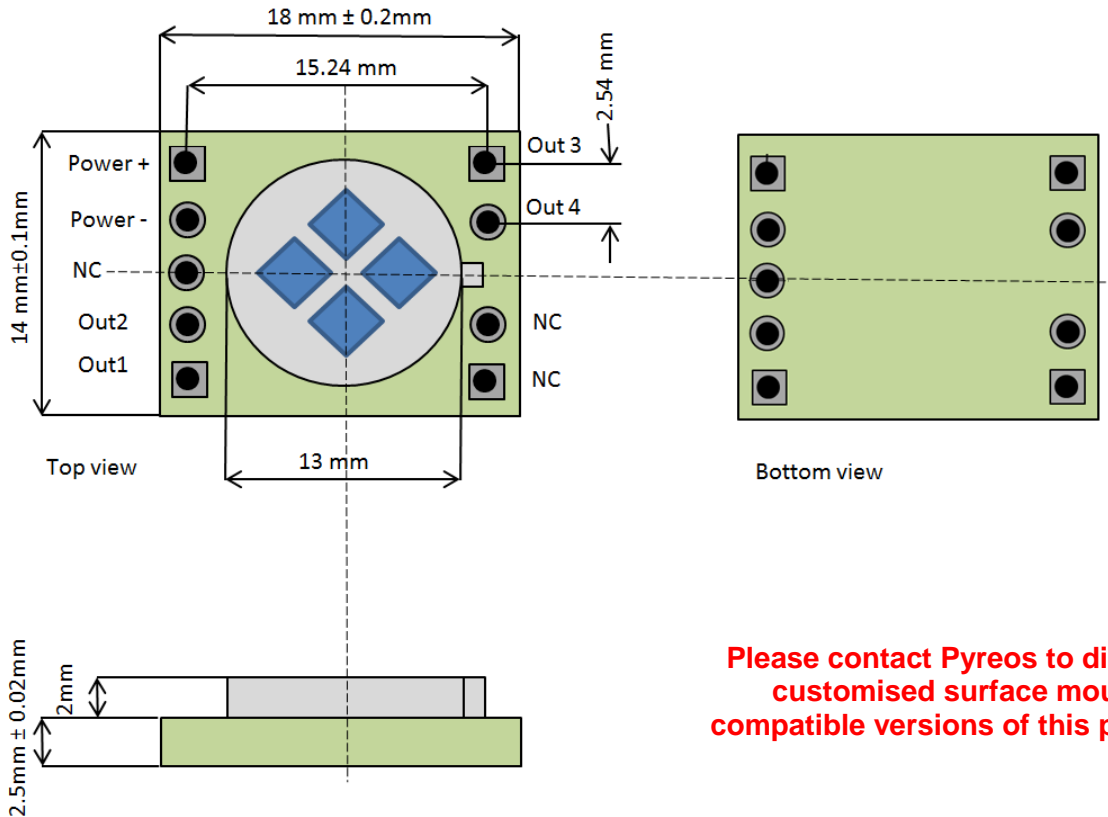
### Frequency Characteristics



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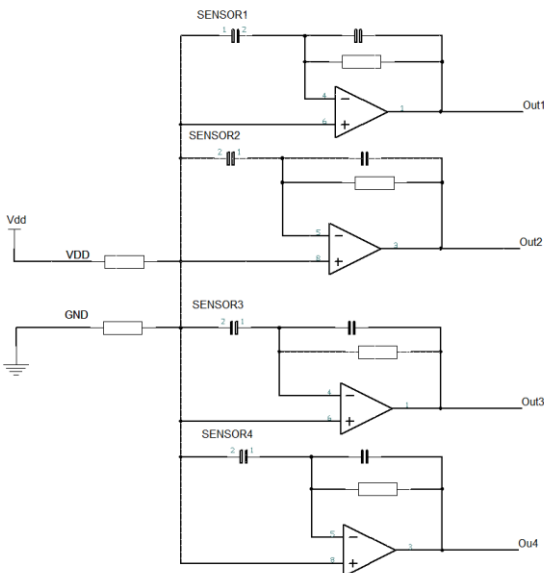


Package Information/ PTH option

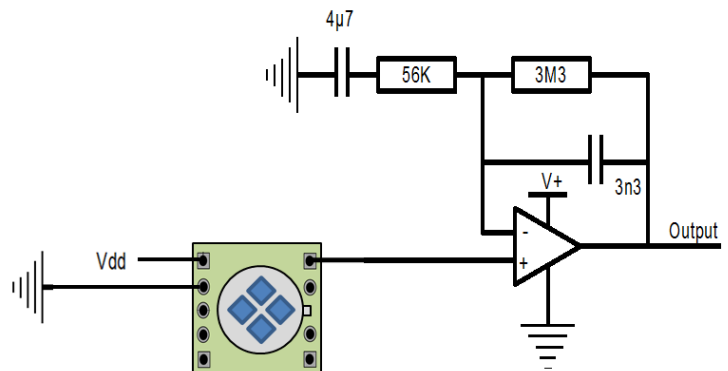


Please contact Pyreos to discuss customised surface mount compatible versions of this product

Schematic



Example circuit



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