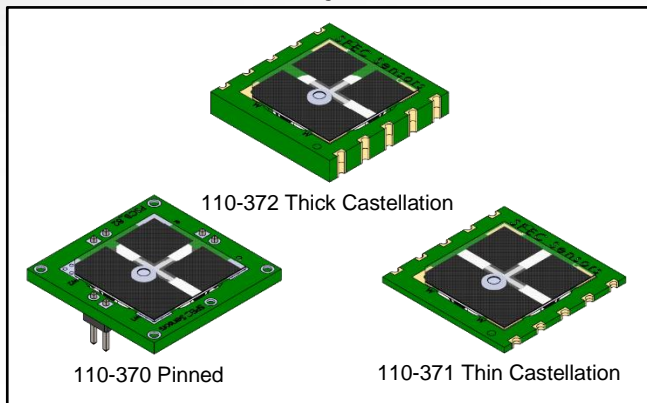
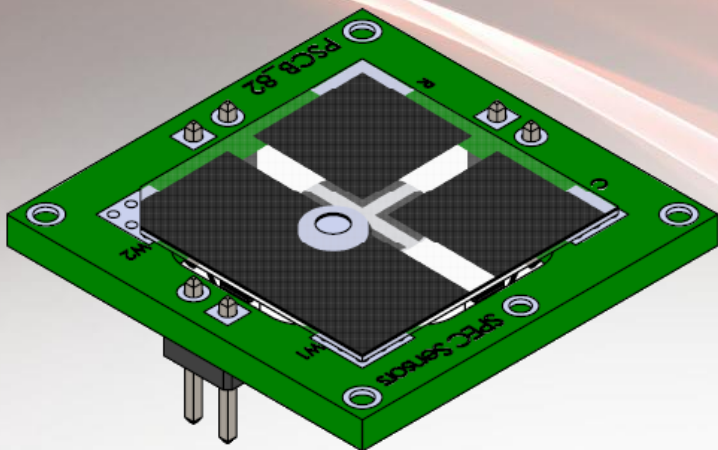


Tert-Butyl Mercaptan (TBM) Sensor 110-37x



Interlink Electronics Screen Printed Electrochemical sensor (SPEC Sensor™) revolutionizes the current state of the art, enabling new applications in consumer, medical and industrial safety. Interlink Electronics offer the performance of the best quality electrochemical sensors at a fraction of the price. The 110-37x family TBM sensors are small and low-profile, facilitating easy integration into wireless, portable, and other IoT solutions. These sensors are ideal for environmental, industrial, health and residential monitoring, because of their high performance, low cost, and small size. IE'S TBM Sensor are available in three packages (110-370, 110-371, 110-372).

FEATURES

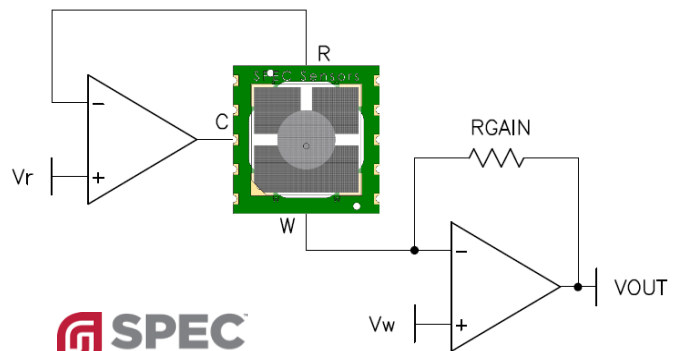
- Small Size & Low Profile (20 x 20 x 3 mm)
- Improved stability and low ppm sensitivity
- Accurate & Linear Response
- Long Life (10 +years)
- Fast Response
- 100% Factory Tested
- Ultra-Low Power < 50 uW max
- ROHS Compliant

APPLICATIONS

- Natural gas (CH₄ and LP) odorant detection
- Natural Gas storage, pipeline and fitting leak detection
- Food odor for quality and safety
- Indoor air quality
- Wine quality monitoring
- Breath odor detection and health diagnosis (e.g. – liver failure, diabetes mellitus)
- Smart Homes

The diagram below shows the basic measuring circuit for the 110-37x. The sensor generates an electric current which is converted into output voltage (Vout) using a linear circuit like the one shown.

Notes: $V_{bias} = V_w - V_r$

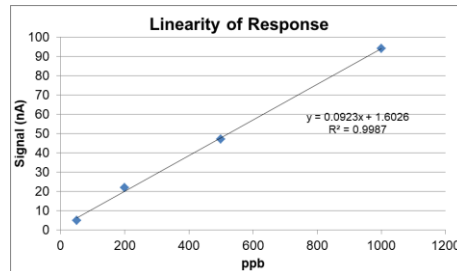
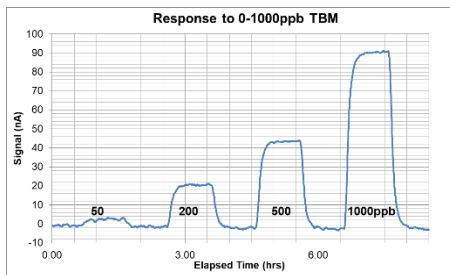


SPECIFICATIONS

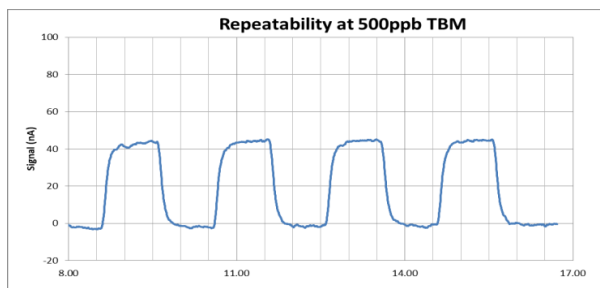
Parameter	Typical Value	Unit	Notes
Measurement Range	0 to 5	ppm	1,2,3
Lower Detection Limit	0.05	ppm	1,2
Resolution	0.02	ppm	1,2
Accuracy	± 1	%	1
Response Time – T (90)	< 30	seconds	1
Sensitivity Range	100 ± 25	nA/ppm	1
Expected Operating Life	10	years	1
Operating Temperature Range	-30 to 55	°C	3
Operating Humidity Range	10 to 95	%	3,4
Operating Pressure Range	0.8 to 1.2	atm	3
Operating Bias Range	0	mV	
Power Consumption	10 to 50	uW	2

1. At standard conditions (25 °C, 50% RH, 1 atm), unless otherwise indicated.
2. Depends on circuit design.
3. Recommended operating range. The sensor may be damaged, and warranty voided if operated outside the specified range. For the best optimum accuracy operate sensor at -20 to 40 °C and 15 to 90% RH.
4. Non-condensing.

KEY CHARACTERISTICS



Linearity



Accuracy

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