

## Catalytic Sensor - CAT25

Innovation, Quality and Expertise for Gas Detection.

### Operating Performance

Operating Principle	Constant voltage
Gas Detected	Most combustible gases & vapours
Measurement Range	0-100% LEL
Operating Voltage	3.3V $\pm$ 0.2V
Operating Current	70mA $\pm$ 5mA
Maximum Power Consumption	230mW
Maximum Methane Concentration	5% v/v
Expected Operating Life	Greater than two years in air
Output Sensitivity	>25mV% methane
Temperature Range	-40°C to +50°C
Pressure Range	1 atm $\pm$ 10%
Humidity Range (non-condensing)	Continuous: 15-90% RH Intermittent: 0-99% RH
Response Time (T <sup>5</sup> <sub>90</sub> )	<10 seconds
Long Term Zero Drift	< $\pm$ 5% LEL methane per year
Long Term Span Drift	< $\pm$ 2% LEL methane per month
Linearity	$\pm$ 10% LEL up to 100% LEL

### Poison Resistance

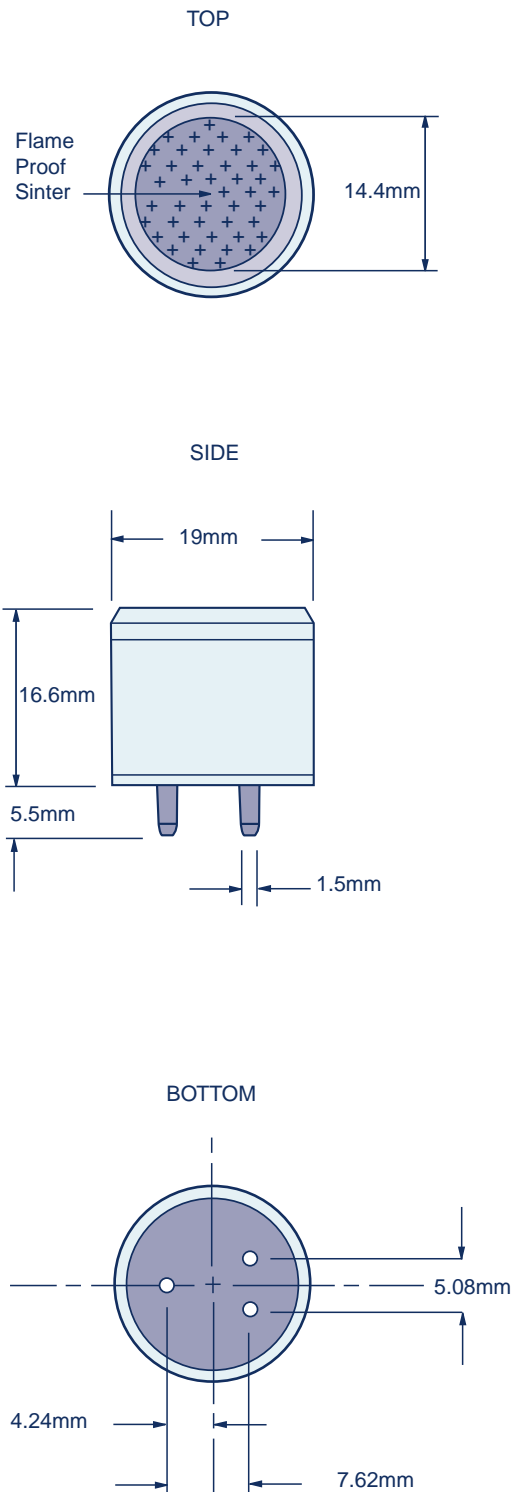
Hexamethyl-Disiloxane	Some
Hydrogen Sulphide	Some

### Physical Specification

Housing Material	316 Stainless Steel
Sinter Material	316 Stainless Steel 150 $\mu$ m maximum pore size 4.0 to 4.5g/cm <sup>2</sup> density
Storage Life	6 months in sealed container
Storage Conditions	10-20°C, 45-75% RH in clean air
Orientation	Any
Warranty Period	12 months from date of despatch

### Ordering Details

Part Number	2111B3125
Order From	Sixth Sense 4 Stinsford Road, Poole, Dorset, England BH17 0RZ Tel: (44) 01202 645770 Fax: (44) 01202 665331 e.mail: sensors@sixth-sense.com www.sixthsense.com
Code date:	06/00

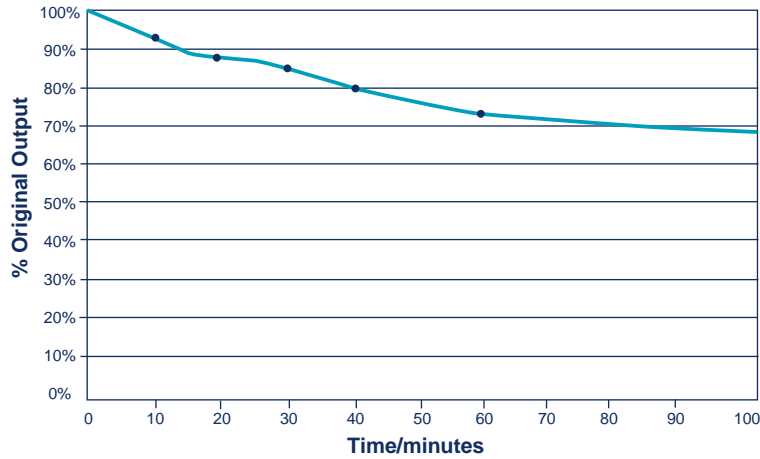




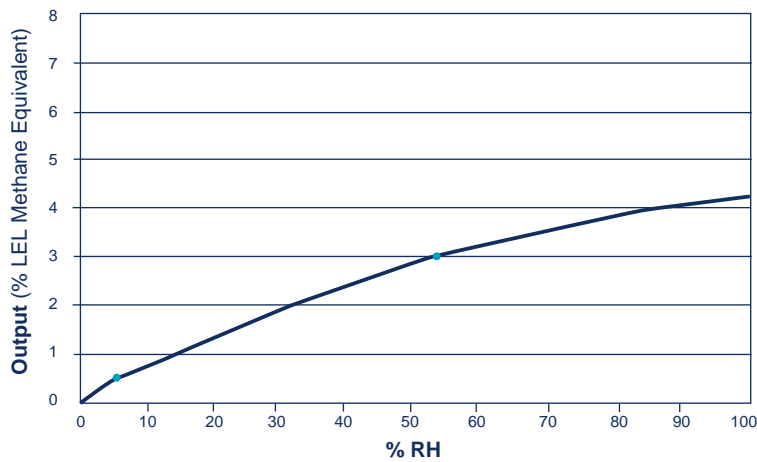
## Additional Information

Innovation, Quality and Expertise for Gas Detection.

**CAT25 Poison Resistance (2.5% v/v methane, 2ppm HMDS)**



**CAT25 Relative Humidity Zero Profile (40°C and 0-100% RH)**



Relative Response Data*			
Gas/Vapour	Relative Response%	Gas/Vapour	Relative Response%
Methane	100	Ethanol	64
Hydrogen	107	Propan-2-ol	49
Ethane	82	Acetone	50
Propane	63	Butan-2-one (MEK)	48
Butane	51	MIBK	-
Pentane	50	Cyclohexane	-
Hexane	46	Di-Ethyl Ether	40
Heptane	44	Ethyl Acetate	46
Octane	38	Toluene	44
Ethylene	81	Xylene	31
Methanol	84	Acetylene	47

\*Note: These figures are to be used as a guide only. For greatest accuracy, gas detectors should be calibrated with the target gas.  
In the interest of product improvement Sixth Sense reserve the right to alter design features and specifications without notice.