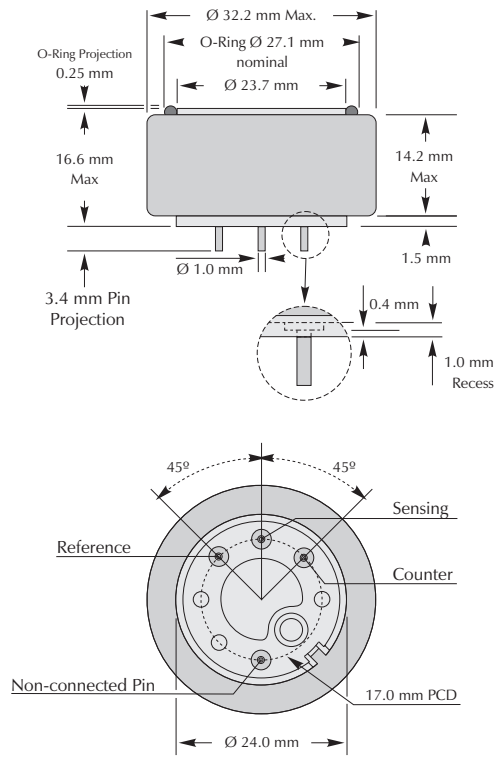
7HL CiTiceL®

Performance Characteristics

Nominal Range	0-50ppm
Maximum Overload	100ppm
Expected Operating Life	Two years in air
Output Signal	0.75 ± 0.25 µA/ppm
Resolution	0.5ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	No data
T_{90} Response Time	≤120 seconds (typically 100)
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	0 to +2ppm
Maximum Zero Shift (+20°C to +40°C)	4ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	33Ω
Bias Voltage	+300mV
Repeatability	2% of signal
Output Linearity	Linear

N.B. All performance data is based on conditions at 20°C, 50%RH, and 1013mBar



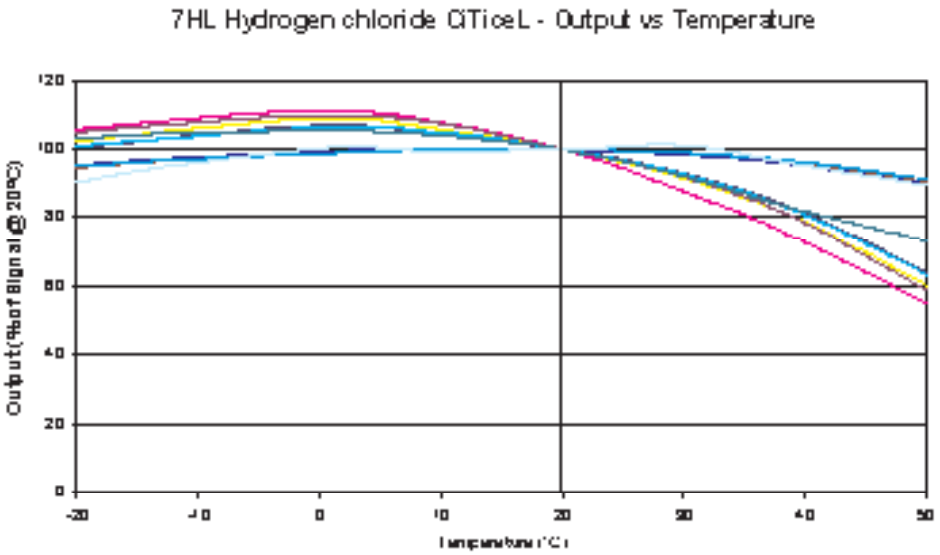
All tolerances ±0.15mm unless otherwise stated.
Do not solder to pin connections

IMPORTANT NOTE: Connection should be made via PCB sockets only. Soldering to the pins will render your warranty void.

Physical Characteristics

Weight	17g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch

City Technology Ltd, City Technology Centre, Walton Rd, Portsmouth PO6 1SZ, UK
Tel:+44 23 9232 5511, Fax:+44 23 9238 6611, www.citytech.com



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 7HL CiTiceLs have been tested with a number of commonly cross-interfering gases and the results are given below. The table shows the typical response to be expected from a sensor when exposed to a given test gas concentration (relevant to safety, e.g. TLV levels).

Gas	Conc.	7HL	Gas	Conc.	7HL
Carbon monoxide:	300ppm	<3ppm	**Chlorine:**	1ppm	-0.05<x$<0.1ppm
Hydrogen sulphide:	15ppm	27<x$<45ppm	**Hydrogen:**	100ppm	<0.5ppm
Sulphur dioxide:	5ppm	1.5<x$<3.5ppm	**Hydrogen cyanide:**	10ppm	<0.3ppm
Nitric oxide:	35ppm	0ppm	**Ethylene:**	100ppm	<6ppm
Nitrogen dioxide:	5ppm	0.5<x$<1ppm	**For details of other possible cross-interfering gases contact City Technology.**		

Ordering Information:

Also available with bias board (7BHL)

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SAFETY NOTE

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

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