



7ST/F CiTiceL[®]

Performance Characteristics

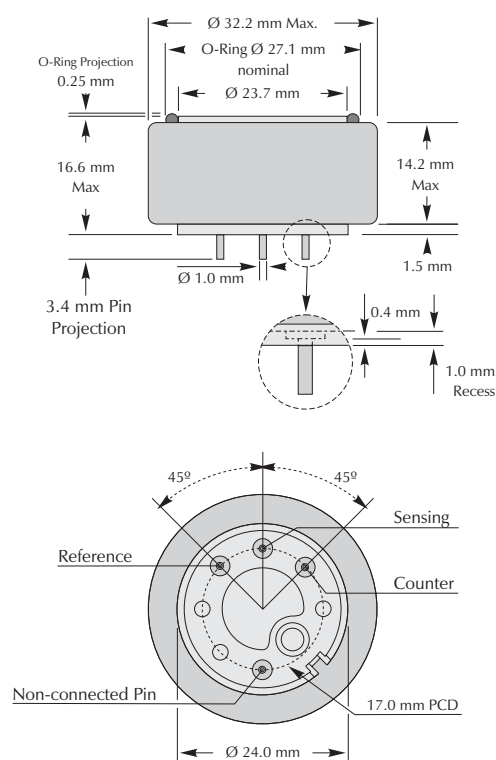
Nominal Range	0-100ppm
Maximum Overload	500ppm
Inboard Filter	To remove H ₂ S
Expected Operating Life	Two years in air
Output Signal	0.37 ± 0.07 µA/ppm
Resolution	0.5ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	0.015 % signal/mBar
T₉₀ Response Time	≤20 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-0.25 to +0.5ppm equiv.
Maximum Zero Shift (+20°C to +40°C)	1ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10Ω
Bias Voltage	Not required
Repeatability	1% of signal
Output Linearity	Linear

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

Physical Characteristics

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

Outline Dimensions



All tolerances ±0.15mm unless otherwise stated.

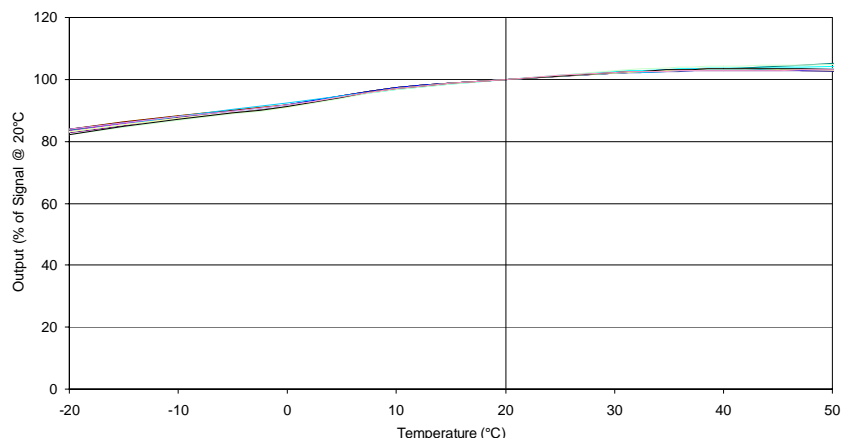
Do not solder to pin connections

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

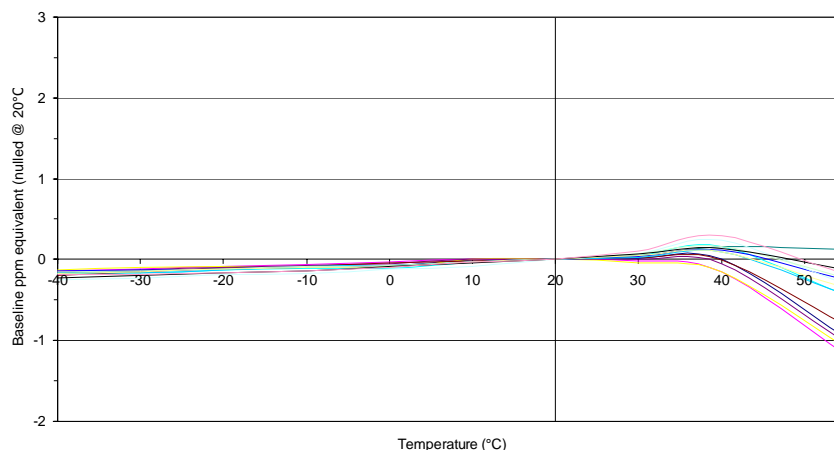
Sulphur dioxide CiTiceL[®] Specification



7ST/F Sulphur dioxide - Output vs Temperature



7ST/F Sulphur dioxide CiTiceL - Baseline vs Temperature



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 7ST/F 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).

<u>Gas</u>	<u>Conc.</u>	<u>7ST/F</u>	<u>Gas</u>	<u>Conc.</u>	<u>7ST/F</u>
Carbon monoxide:	300ppm	<5ppm	Hydrogen:	100ppm	0ppm
Hydrogen sulphide:	15ppm	0ppm	Hydrogen cyanide:	10ppm	<5ppm
Nitric oxide:	35ppm	-7<x\$<0ppm	Hydrogen chloride:	5ppm	0ppm
Nitrogen dioxide:	5ppm	≈-5ppm	Ethylene:	100ppm	0ppm
Chlorine:	5ppm	-1.5<x\$<0ppm	**For details of other possible cross-interfering gases contact City Technology.**		

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Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.