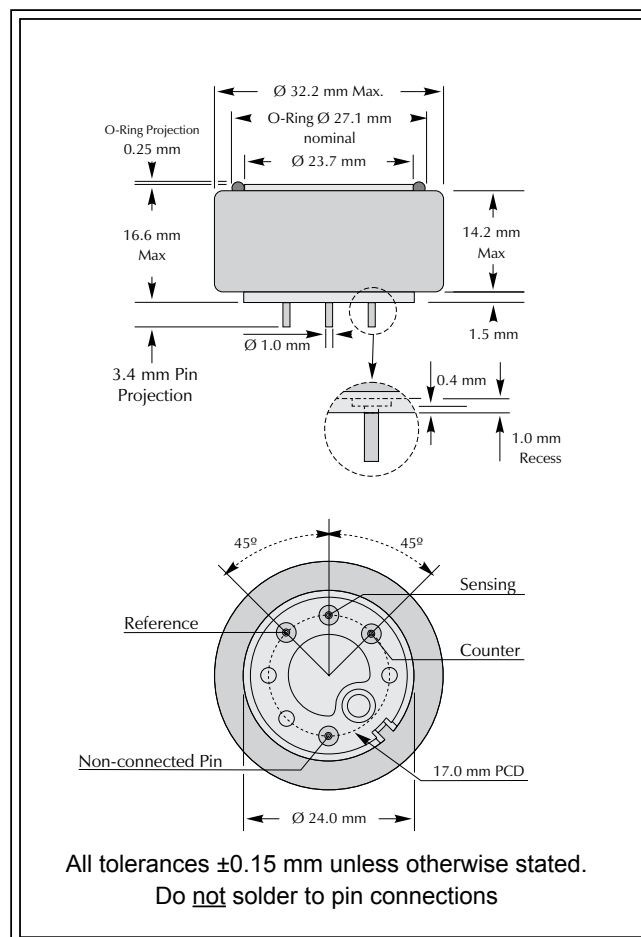


Nitric oxide CiTiceL<sup>®</sup> Specification7NT Compact CiTiceL<sup>®</sup>**Performance Characteristics**

<b>Nominal Range</b>	0-100 ppm
<b>Maximum Overload</b>	1500 ppm
<b>Expected Operating Life</b>	Three years in air
<b>Output Signal</b>	$0.55 \pm 0.11 \mu\text{A/ppm}$
<b>Resolution</b>	0.5 ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric $\pm 10\%$
<b>Pressure Coefficient</b>	0.016% signal/mBar
<b>T<sub>90</sub> Response Time</b>	$\leq 15$ seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (pure air)</b>	0 to +3 ppm equivalent
<b>Maximum Zero Shift (+20°C to +40°C)</b>	9 ppm equivalent
<b>Long Term Output Drift</b>	<2% signal loss/month
<b>Recommended Load Resistor</b>	10 $\Omega$
<b>Bias Voltage</b>	+300 mV
<b>Repeatability</b>	2% of signal
<b>Output Linearity</b>	Linear



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

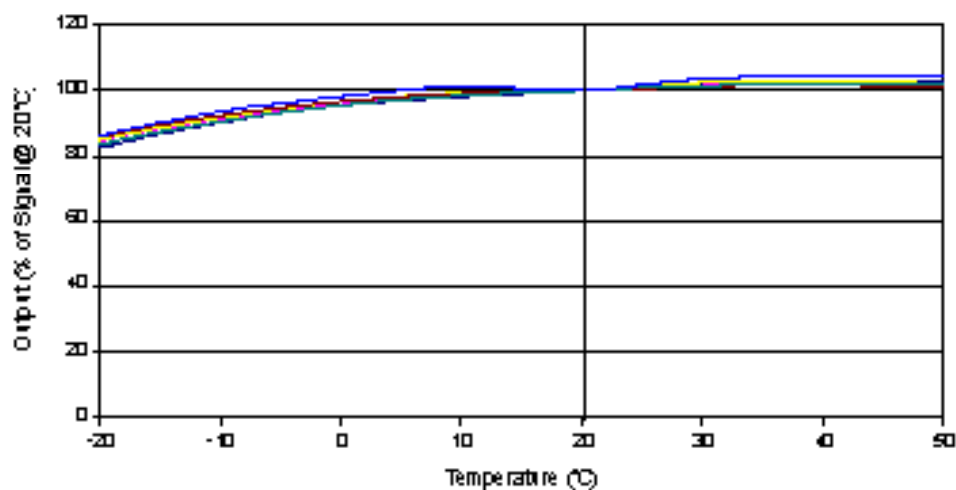
**Physical Characteristics**

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

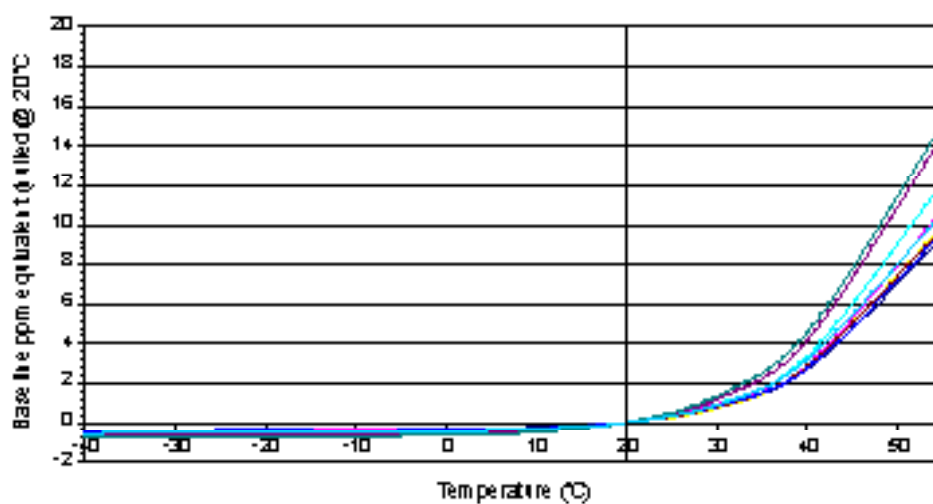
**IMPORTANT NOTE:** Connection should be made via PCB sockets only. Soldering to the pins will render your warranty void.

Nitric oxide CiTiceL<sup>®</sup> Specification

7NT Nitric oxide CiTiceL - Output vs Temperature



7NT Nitric oxide CiTiceL - Baseline vs Temperature



## Nitric oxide CiTiceL<sup>®</sup> Specification

### Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 7NT 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.	7NT	Gas	Conc.	7NT
Carbon monoxide:	300ppm	0ppm	Chlorine:	1ppm	0ppm
Hydrogen sulphide:	15ppm	≈5ppm	Hydrogen:	100ppm	0ppm
Sulphur dioxide:	5ppm	0ppm	Hydrogen cyanide:	10ppm	0ppm
Nitrogen dioxide:	5ppm	<1.5ppm	Hydrogen chloride:	5ppm	<1ppm
Nitrous oxide:	100ppm	0ppm	Ethylene:	100ppm	0ppm

#### Ordering Information:

Also available with bias board - 7BNT

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