



TECHNICAL INFORMATION SHEET

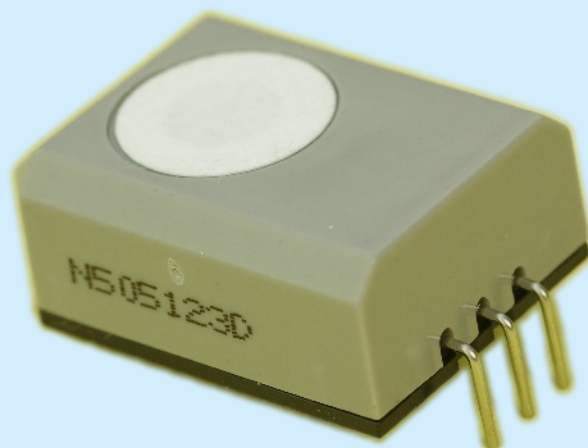
NAP-505 Low-cost Electrochemical Carbon Monoxide (CO) Gas Sensor

Nemoto Sensor
Engineering Co., Ltd.
4-10-9, Takaido-higashi,
Suginami-ku, Tokyo,
JAPAN

General Description

The NAP-505 Gas Sensor is a low cost 3-Electrode Electrochemical cell designed for the detection and measurement of carbon monoxide in the range 0-1000ppm, in domestic carbon monoxide detectors, fire detectors and air quality monitors.

- Highly specific to target gas
- Unaffected by humidity
- 7 year lifetime
- Very low long term drift
- Low power consumption
- 3-Electrode design for greater stability
- Compact, leak-proof enclosure
- Resistant to shocks and vibration
- Terminals may be soldered



Specifications:

Detectable Gas	Carbon monoxide (CO)
Detection Range	0-1000ppm
Maximum overload	2000ppm
Output Current	40 +/- 10 nA/ppm
Reproducibility (same day)	+/- 2%
Zero in clean air	<+/- 5ppm equivalent)
Long term output drift	< 5% / year
Response time (T _{90%})	< 30 seconds
Temperature drift (zero)	<10ppm (-20°C to +50°C)
Expected lifetime	> 7 years
Temperature Range:	-20°C to +50°C
Humidity range (constant)	15-90% RH
Humidity range intermittent)	0-99% RH
Pressure	0.9 - 1.1 atm
Recommended load resistor	10 Ω
Bias voltage	Not required
Recommended storage temp	0°C to +20°C
Storage time	6 months
(Without compromising lifetime)	

Typical Cross-Sensitivities

Gas	% Cross-sensitivity
Carbon Monoxide	100
Hydrogen sulphide	0
Hydrogen	40
Methane	0
Carbon dioxide	0
Sulphur dioxide	0
Nitric oxide	0
Nitrogen dioxide	< 5
Ammonia	0
Ethanol	< 2
Ethylene	0
Chlorine	0

Test data on drift, poisoning, temperature performance, linearity etc are available on the Characterisation Document / Full manual.

Nemoto has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice

nap-505.ppp, issue 4, August 2015

Contact Information:

Europe & Africa Area
Asia Area
Americas Area

Website

www.nemoto.eu
www.nemoto.co.jp
www.nemoto.eu

email

eusensor@nemoto.co.jp
sensor2@nemoto.co.jp
nasensor@nemoto.co.jp

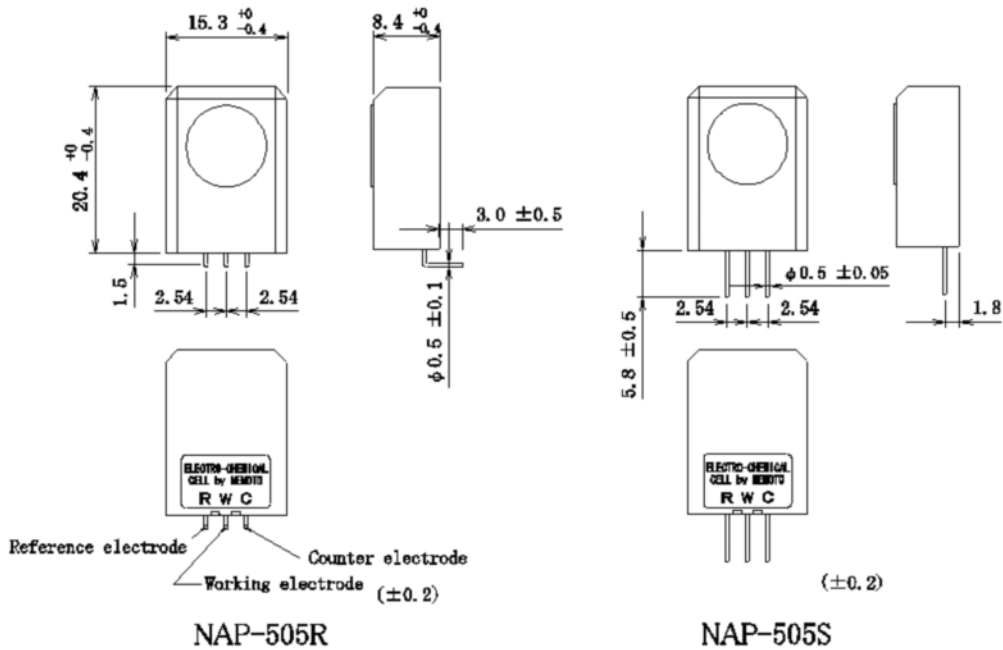
Telephone

+44 (0)1799 543968
+81 3 3333 2760
+1 604 761 7363

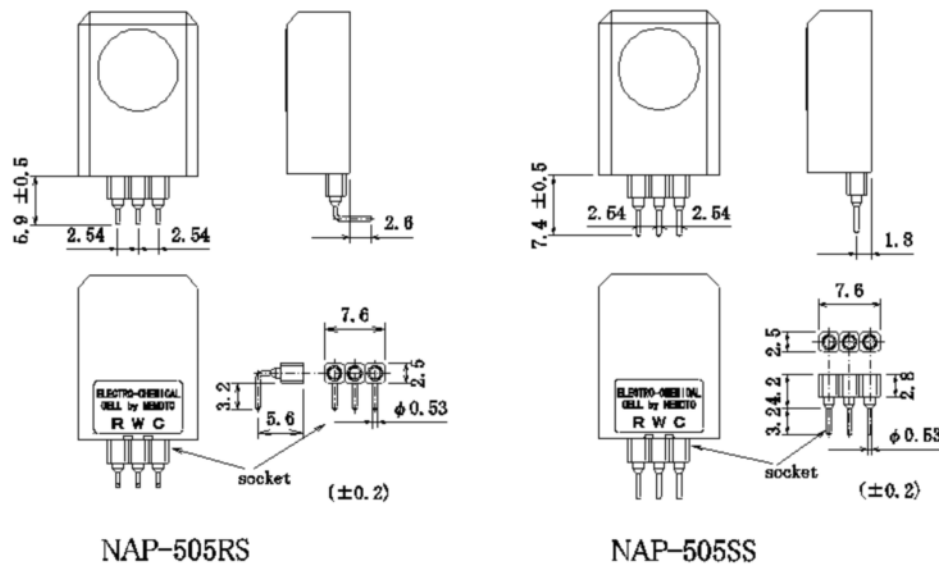


Dimensions:

Direct Soldering Models



Socket Models



Test data on drift, temperature performance, linearity etc are available on the Characterisation Document / Full Manual

Nemoto has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice

nap-505.ppp, issue 4, August 2015

Contact Information:

Europe & Africa Area
Asia Area
Americas Area

Website

www.nemoto.eu
www.nemoto.co.jp
www.nemoto.eu

email

eusensor@nemoto.co.jp
sensor2@nemoto.co.jp
nasensor@nemoto.co.jp

Telephone

+44 (0)1799 543968
+81 3 3333 2760
+1 604 761 7363