



TECHNICAL INFORMATION SHEET NCP-170 Pellistor Gas Sensor

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General Description

The Nemoto NCP-170 is a catalytic (pellistor) type flammable gas sensor supplied as a matched pair of elements mounted on TO4 size headers and protected by a metal can.

The sensor detects and measures the presence of flammable gases and vapours in air, in the range 0- 100% of the Lower Explosive Limit (LEL) of the gas or vapour being measured.

Designed as a sensing platform for use in fixed flammable gas detection systems, the NCP-170 exhibits excellent long term zero and sensitivity stability and a high level of resistance to catalytic poisons. The device is compatible with a wide range of commercially available Gas Detection Systems and remote flammable gas detection heads.

The highly automated manufacturing procedure employed by Nemoto results in a repeatable reliable sensor which, unlike similar devices, requires no trimming resistor to enable the detector to be matched with a compensator.



Specifications:

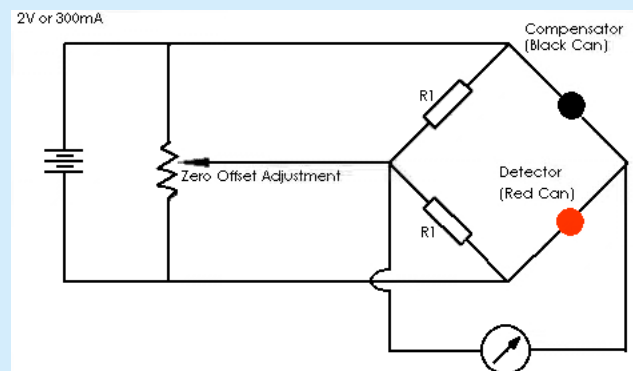
Recommended Voltage:	2.0V +/- 0.1V
Current Drawn:	175 +/- 15mA
Zero Offset:	0mV +/- 25mV
Minimum Sensitivity:	18mV/% CH4/Air
Range:	0-100% LEL
Accuracy:	+/- 1%LEL(CH4)

Maximum Long Term Drift:

Span:	< +/- 1% Signal/Month
Zero:	< +/- 0.5 mV/Month
Response Time:	T50: 3 sec T90: 8 sec
Temperature Range:	-20°C to +70°C
Temperature Drift:	(-20°C to +70°C): < +/- 2%LEL
Humidity:	0-100%RH, non-condensing
Humidity Response:	+/- 1%LEL
Linearity:	Effectively Linear to 100%LEL

Recommended Circuit:

Note: The value R1 is arbitrary, since the function of R1 is to balance the bridge. 1K is suggested.



Test data on drift, poisoning, temperature performance, linearity are available on the Characterisation Document.

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

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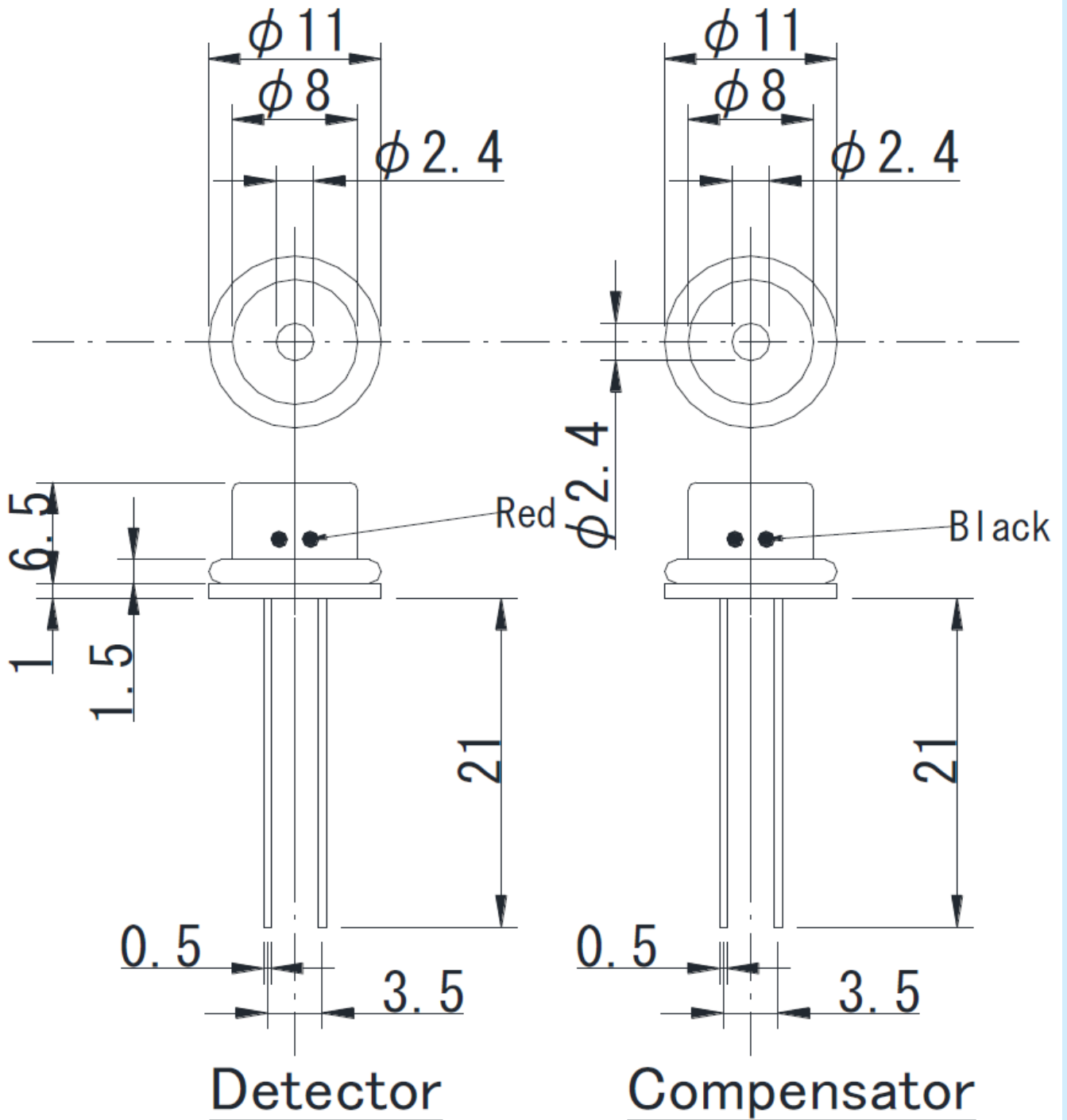
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Dimensions



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