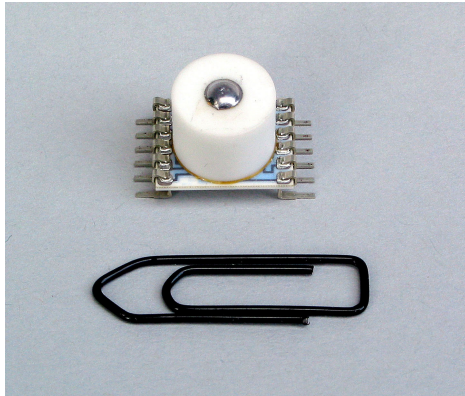


Low cost, Tilt Sensor



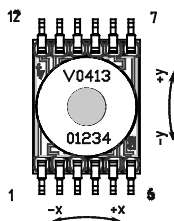
Theory of Operation:

The NS-25/C2 is a biaxial, tilt sensor. The sensor works in the way that an electrolytical fluid is formed out by applying an AC-voltage on the planar electrode structures. When the sensor is tilted, the fluid level over the different electrodes and, in consequence, the conductance of the stray field is changed. Using a difference measurement principle, the tilt angle and the tilt direction can be measured. This sensor requires a separate conditioning circuit.

Applications

- Automotive systems
- Theft alarm systems
- Body control systems
- Industrial market

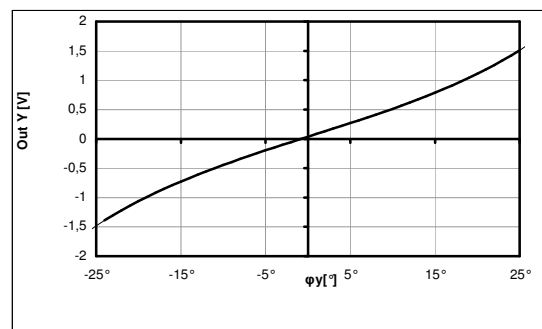
Pin out



Advantages

- Small size
- High performance
- Small TC
- Very low cost unit
- Automatic assembly
- Reflow soldering

Typical curve characteristic



Specification (preliminary)

	Conditions	Min	Typ	Max	Unit
Measurement range		-25		+25	°
Absolute maximum rating ⁽¹⁾		-60		+60	°
Resolution		0.001			°
Solder temperature	Reflow			+230	°C
Rise time ⁽²⁾	5 ° > 0 °; Tamb = -25 °C			0.5	s
Operation temperature range		-40		+105	°C
Storage temperature range		-40		+105	°C
Weight			1.6		g
Dimensions	W x D x H		10.7 x 18	x 10.8	mm

¹⁾ by operating, under power supply. Don't overstep the maximum rating. Impairment of basic cells possible.
²⁾ Time after reaches maximum difference of 0.1 ° to final value.

This inclinometer can only be mounted in a horizontal position (x-y plane).

HL-Planartechnik GmbH

Hauert 13, 44 227 Dortmund, Tel.: +49 (0) 231/97400, Fax.: +49 (0) 231/974020

Internet: <http://www.hlplanar.com> E-Mail: service@hlplanar.de