



Nickel Temperature Sensor

ND1K0.520.3W.B.015

1/1

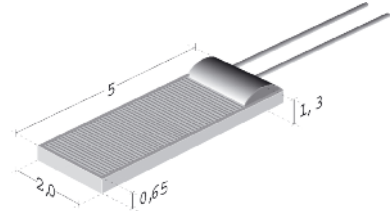


Product

In many sectors, temperature measurement is one of the most important physically defined parameter to determine product quality, security and reliability. Temperature sensors are produced with different technologies to fit specific application requirements. To this end, IST has concentrated the development, manufacturing processes and materials to produce high-end thin-film temperature sensors. This know-how, partially derived from the semiconductor industry, allows IST to manufacture sensors in very small dimensions. Thin-film temperature sensors exhibit a very short response time due to their low thermal mass. The technologies and processes of IST thin-film sensors combines the positive attributes of traditional wire-wound nickel sensors - accuracy, long-term stability, repeatability and interchangeability within a wide temperature range. The advantages of thin-film mass production.

Features

- Fast response time
- Small dimensions
- Vibration and temperature shock resistant
- Excellent long-term stability
- Simple linearization
- Low self-heating
- Easy interchangeability



Technical Data

Nominal resistance:	1000 Ohm at 0°C	
Temperature range:	-60°C - +300°C	
Characteristic curve:	6180 ppm/K	
Long term stability:	< less than 0.1% @ 1000 hrs. max. temperature	
Response time (t _{63%}):	Water (v=0.4 m/s)	0.3 s
	Air (v=1m/s)	8.5 s
Self heating:	Water (v=0 m/s)	80 mW/K
	Air (v=0 m/s)	7 mW/K
Dimensions (LxWxH):	5 x 2 x 1.3 mm (LxWxH)	
Tolerance:	DIN 43760	
Contacts:	Ni-wire, Ø 0.2 mm, 15 mm long	
Recommended applied current:	0.3 mA (1000Ohm)	



INNOVATIVE SENSOR TECHNOLOGY

