



SMD series

SMD nickel sensor



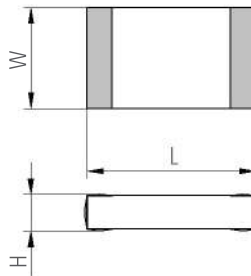
INNOVATIVE SENSOR TECHNOLOGY

For the automatic assembling on PCBs

Benefits & Characteristics

- Vibration and temperature shock resistant
- Simple linearization
- Excellent long-term stability
- Low self-heating
- Reflow solderable
- Available as Tape&Reel
- Customer specific sensor available upon request

Illustration¹⁾



1) For actual size, see dimensions

Technical Data

Operating temperature range:	-60 °C to +150 °C
Nominal resistance:*	891 Ω at 0 °C
Characteristics curve:*	6370 ppm/K (Nickel NJ)
Long-term stability:	< 0.1 % at 1000 h at maximal operating temperature
Tolerance class (dependent on temperature range):*	Customer specific IST AG reference K
Connections:*	2P (Contacts tin-coated (100% Sn) (reflow solderable)) Bondable contacts without bumps available on request
Solderability:	235 °C ≤ 8 s (DIN IEC 68 2-20, Ta Meth. 1)
Resistance to soldering heat: ¹⁾	260 °C 10 s (DIN IEC 68 2-20, Ta Meth. 1A)
<small>1) The soldering process can influence accuracy</small>	
Recommended applied current: ²⁾	0.3 mA at 891 Ω
<small>2) Self-heating must be considered</small>	
Other alternatives:*	Substrate thickness
Packaging:	< 100 pcs in bags > 100 pcs taped on reel (sensor side up or sensor side down)

* Customer specific alternatives available



SMD series

SMD nickel sensor



For the automatic assembling on PCBs

Order Information - 2P (Contacts tin-coated (100% Sn), LMP lead-free (reflow solderable))

Size	Dimensions (L x W x H in mm)	Class K - Customer specific
Packed in bags (< 100 pcs)		
6370 ppm/K (Nickel NJ)		

Nominal resistance: 891 Ω at 0 °C

0805	2 x 1.2 x 0.4	NJ891.0805.2P.K
Order code		020.00541

Taped on reel - sensor side up or sensor side down (> 100 pcs)

6370 ppm/K (Nickel NJ)

Nominal resistance: 891 Ω at 0 °C

0805	2 x 1.2 x 0.4	Sensor side up	NJ891.0805.2P.K.S
Order code			020.00657
0805	2 x 1.2 x 0.4	Sensor side down	NJ891.0805.2P.K.S
Order code			020.00624

Additional Documents

Application note:	Document name: ATN_E
-------------------	-------------------------



Order Information



INNOVATIVE SENSOR TECHNOLOGY



SMD nickel sensor

Secondary reference



Material

N = Nickel

TCR

J = 6370 ppm/K

Resistance in Ω at 0 °C

Size in mm

Operating temperature range

2 = -60 °C to +150 °C

Connection

(2)P = contacts tin-coated (100% Sn) (reflow solderable)

Tolerance class

K = customer specific

Special

S = special

N J 891. 0805. 2 P. K. S



INNOVATIVE SENSOR TECHNOLOGY

Innovative Sensor Technology IST AG, Stegrütistrasse 14, CH-9642 Ebnat-Kappel, Switzerland,
Phone: +41 (0) 71 992 01 00 | Fax: +41 (0) 71 992 01 99 | E-mail: info@ist-ag.com | Web: www.ist-ag.com



All mechanical dimensions are valid at 25 °C ambient temperature, if not differently indicated • All data except the mechanical dimensions only have information purposes and are not to be understood as assured characteristics • Technical changes without previous announcement as well as mistakes reserved • The information on this data sheet was examined carefully and will be accepted as correct; No liability in case of mistakes • Load with extreme values during a longer period can affect the reliability • The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner • Typing errors and mistakes reserved • Product specifications are subject to change without notice • All rights reserved