



SMD Series

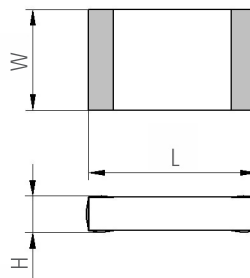
SMD nickel sensor

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):* | IST AG reference Customer specific 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) |
| <i>1) The soldering process can influence accuracy</i> | |
| Recommended applied current: ²⁾ | 0.3 mA at 891 Ω |
| <i>2) Self-heating must be considered</i> | |
| 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



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 | | | |
| <i>Former order code</i> | | | <i>020.00541</i> |

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 | | | 103252 |
| <i>Former order code</i> | | | <i>020.00657</i> |
| 0805 | 2 x 1.2 x 0.4 | Sensor side down | NJ891.0805.2P.K.S |
| Order code | | | |
| <i>Former order code</i> | | | <i>020.00624</i> |

Additional Documents

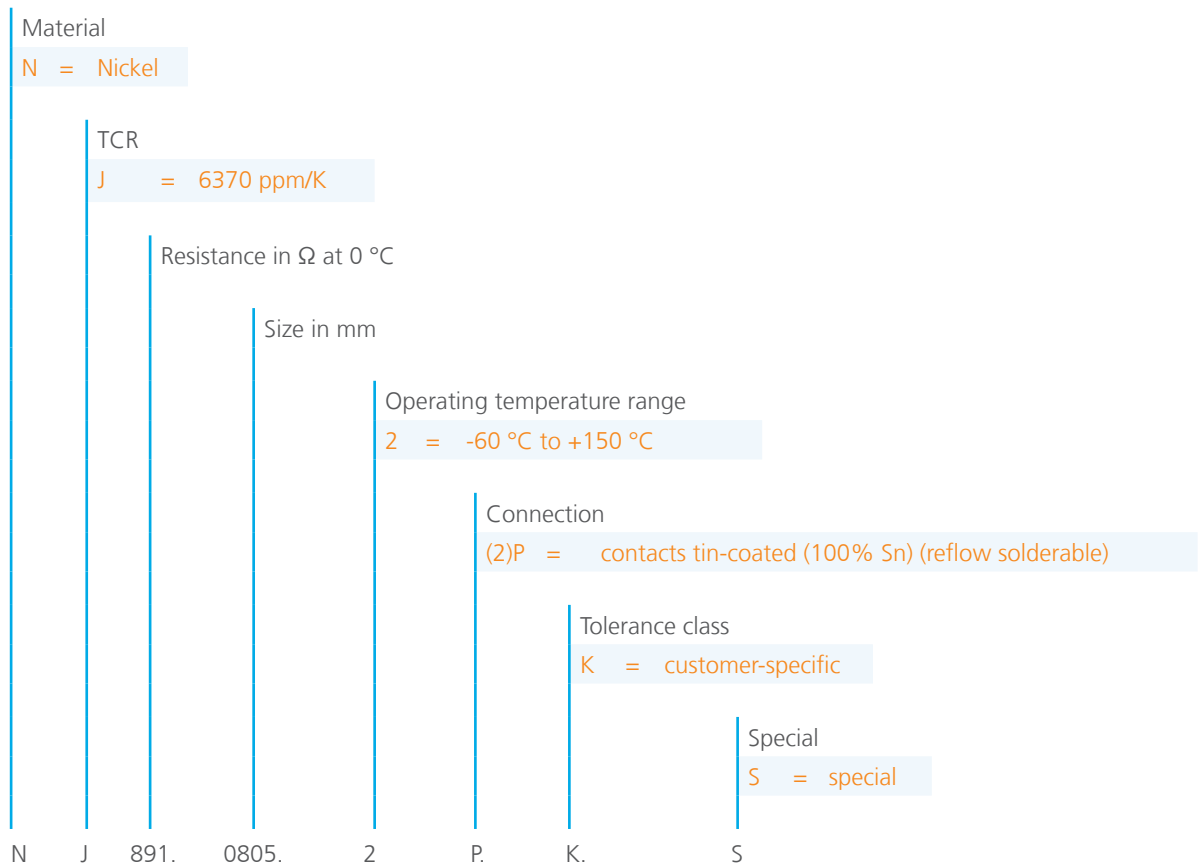
| | |
|-------------------|-------------------------|
| Application note: | Document name: ATN_E |
|-------------------|-------------------------|



Order Information

SMD nickel sensor

Secondary reference



Innovative Sensor Technology IST AG, Stegrütistrasse 14, 9642 Ebnat-Kappel, Switzerland
Phone: +41 71 992 01 00 | Fax: +41 71 992 01 99 | Email: info@ist-ag.com | 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