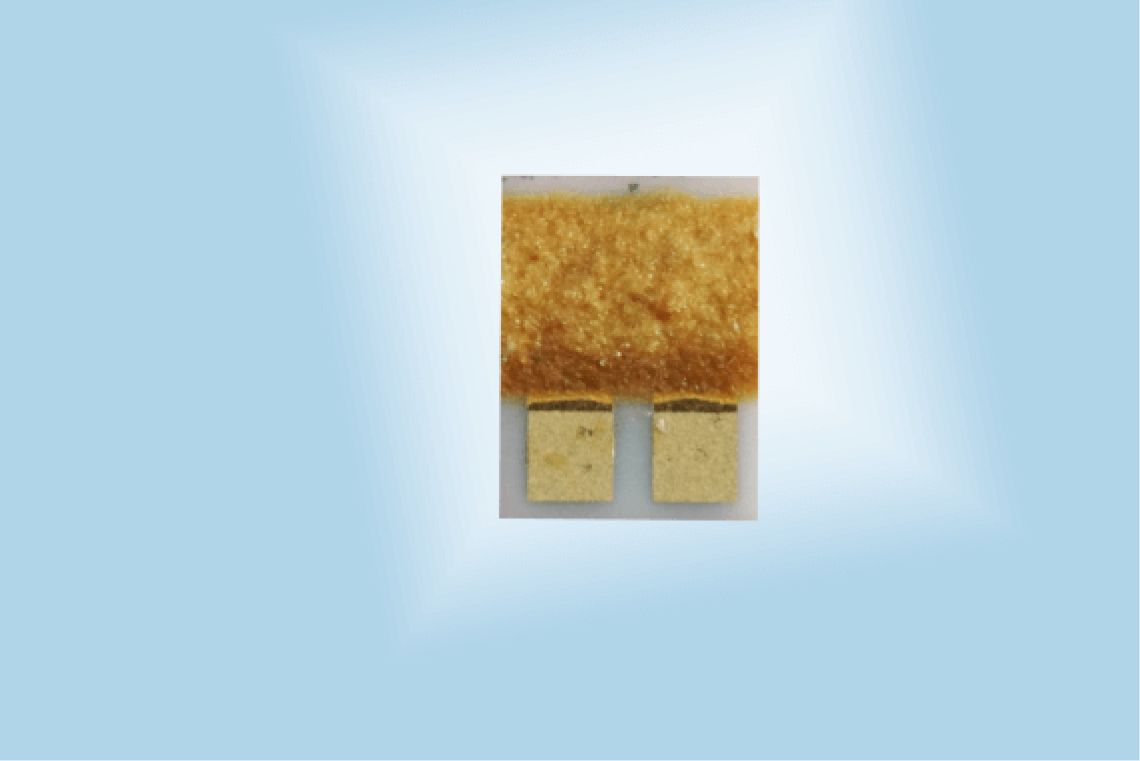
Pt1000 class F0.3 with bondable Au-Pads, metallized backside



-50 °C to +200 °C, 1.6 x 1.2 mm, bondable Au-Pads, metallized backside. Its improved thermal conductivity makes it ideal for various applications in the semiconductor and microelectronics industries, medical devices, aerospace and defense, industrial instrumentation, e-mobility and automotive

This sensor boasts high precision, reliability and is easy to integrate into MEMS sytems. It is ideal for:

- Embedded temperature sensing in hybrid circuits or multi-chip modules
- Thermal management in high-densitiy integrated circuits
- Lab-on chip systems for high-precision thermal control in diagnostics
- Thermal monitoring in sensitive instrumentation or guidance systems
- Optical and DIE package integration, temperature control of LEDs or high-power ICs

- Battery management systems in EVs
- Power electronics thermal monitoring

Customer-specific sensors are available upon request

Product Name: P1K0.161.3FC.B.M
Nominal resistance: 1000 Ω at 0 °C
Operating temperature range: -50°C to 200°C
TCR: Pt 3850 ppm/K
Chip size/dimensions: 1.6 x 1.2 x 0.25 mm
Tolerance/class: IEC 60751 F0.3 (IST AG tolerance class B)
Connection type: bondable Au-Pads
Special: bondable Au-Pads, metallized backside
Packaging: Chip tray, sensor-side up
Product code: 100797

Product details

Platinum Sensors

Innovative Sensor Technology IST AG platinum temperature sensors provide solutions for extreme temperature applications and are designed with the highest quality materials, allowing them to operate within a wide temperature range of -200 °C to +1000 °C. Standard IEC 60751 sensors are offered in class F0.3 (0.12 %), class F0.15 (0.06 %), F0.1 (0.04 %), and higher accuracies upon request.Our sensors are available in wireless (SMD) and wired configurations, and in sizes ranging from 0.75 mm to 10 mm (L), and 0.75 mm to 5.08 mm (W). Standard sensors can be customized with a variety of lead wire material, insulations, length, and configurations.

With many years of experience, iST also offers development of customer-specific applications in terms of sensor technology development and consultation. As part of the standard development process, we give support at the point of implementation - this way we ensure the best sensor solution for specific applications.

More information on platinum temperature sensors

Pt1000 class F0.3 with bondable Au-Pads, metallized backside > Details

Small dimensions

IST AG offers various sensor solutions for applications with limited space requirements.

MiniSens

iST MiniSens features the smallest footprint with dimensions of only 1.2 mm x 1.6 mm making the sensor an optimal solution for limited space applications. The MiniSens is available with accuracies of up to IEC 60751 F0.1 (IST AG reference class Y) and with long directly welded wires. The sensor can be used in applications with an operation temperature range of up to +600 °C.

The MiniSens is also offered with a metallized backside enabling optimal thermal coupling.

SlimSens

The iST SlimSens sensor is specially developed for applications requiring sensors fitted into tubes with very small diameters. The SlimSens measures 0.8 mm x3 mm and is the optimal solution for applications with tube diameters from 1 mm. The SlimSens is available with accuracies of up to IEC 60751 F0.1 (IST AG reference class Y) and with long directly welded wires within various ohmic resistances. This Pt temperature sensor can be used in applications with an operation temperature range of up to +600 °C.

SMD and FlipChip

SMD

IST AG offers wireless RTD Platinum SMD sensors for automatic PCB assembly processes with wrap-around contacts on both ends. We offer different SMD technologies for different applications and temperature ranges, e.g. SAC305-tinned wrap-around contacts for the normal PCB assembly process, high temperature solder wrap-around contacts for high temperature applications up to +250 °C or Ni/Au wrap-around contacts for special requirements or wire bonding applications. The SMD sensors are available with various accuracies of up to IEC 60751 F0.15 (IST AG reference class A) and in different dimensions (0805/1206) with other dimensions upon request. SMD sensors are characterized by excellent long-term stability, fast response time and low self-heating.

The wireless iST FlipChip series features Pt temperature sensors with excellent long-term stability, fast response time and low self-heating. The FlipChips are developed with contacts on one side resulting in no short-cut risk on the backside of the chip. Furthermore, we offer different FC technologies for different assembly processes (reflow-soldering, bonding or welding). The FC sensors are available with accuracies of up to IEC 60751 F0.3 (iST reference class B) and in different dimensions (0603/0805/1206/further dimensions on request) with other dimensions available on request.

FlipChip

The FC sensors are optimal for applications with limited space requirements and offer an optimal price/performance ratio. Due to the small mechanical dimensions, a standard 0805 FC will use the same space as a standard 0603 SMD sensor on a PCB**.**

Quality

Consistent with the well-known, high-quality standards in Switzerland, IST AG is certified according to ISO 9001:2015 (quality) and ISO 14001:2015 (environment). Appropriate processes are part of our daily work. They are regularly audited and extended parallel to the growth of our company.

> Read more

The online shop

Quantity (pieces)	Price (per piece)
10-49	CHF 14.94
50-99	CHF 13.54
100-150	CHF 12.62

Stock: **100**