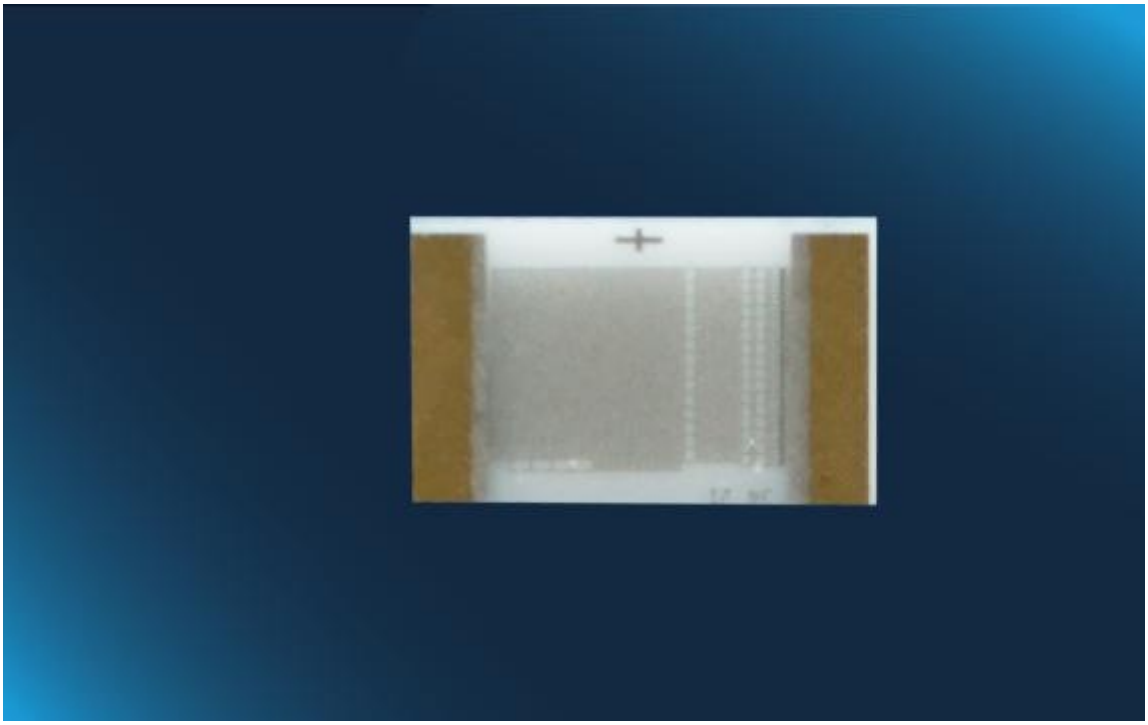
Pt100 FlipChip class F0.3



Temperature range -50 °C to +250 °C, FC 0805

FC (FlipChip) platinum 100 Ohm RTD component

Product Name: P0K1.0805.3FC.B
Nominal resistance: 100 Ω at 0 °C
Operating temperature range: -50 °C to +250 °C
TCR: Pt 3850 ppm/K
Chip size/dimensions: 2.0 x 1.2 x 0.4 mm
Tolerance/class: IEC 60751 F0.3 (IST AG tolerance class B)
Connection type: Bondable and solderable pads (Au)
Product code: 102050

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

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**.**

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.

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

Temperature measurement up to 600 °C in class A (PW)

The IST AG PW RTD sensor has been developed as an alternative to the traditional wire-wound sensors. The PW sensor combines the advantages of high accuracy and precision of the wire-wound sensors with the advantages of thin-film sensors that offer robustness, small dimensions and very low hysteresis at an optimal price level.

Compared to a standard thin-film sensor measuring up to +300 °C in IEC 60751 F0.15 (iST reference class A), the iST PW sensor measures with high accuracy up to IEC 60751 F0.15 (iST reference class A) within a wide operating temperature range from -200 °C to +600 °C.

Due to the special construction and stable characteristics curve, the iST PW sensor is also suitable for low temperature applications. As an additional feature, the PW sensor is available in round ceramic housing with the same dimensions as a traditional wire wound sensor, meaning easy interchangeability into existing temperature applications.

ESD optimized design

To strenghten the stability of your assembled systems we are committed to the continued optimization and development of ESD-optimized temperature sensors.

With optimized design and new process technology we offer platinum temperature sensors with outstanding ESD resistance. The designs have been tested according to European Union Standards, the IEC/EN61000-4-2.

Thanks to a state-of-the art in-house ESD laboratory, we are able to test our sensors internally according to international standards.

Download flyer for more information.

The online shop

Quantity (pieces)	Price (per piece)
100-250	CHF 3.40
251-500	CHF 2.16
501-2500	CHF 1.96

Stock: **2000**