Platinum Temperature Sensor in FlipChip construction P1K0.0805.1FC.B

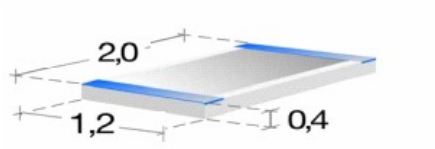
RoHS

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, allowing 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 wirewound platinum sensors - accuracy, long-term stability, repeatability and interchangeability within a wide temperature range. The advantages of thin-film mass-production creates an optimal price/performance ratio.

Features

- Optimised for pick-and-place machines
- Cost-effective assembly
- Easy handling
- Platinum thin film elements
- Lead-free (acc. RoHS)
- Reflow soldering



Technical Data

Nominal resistance:	1000 Ohm at 0°C	
Temperature range:	-50°C … +150°C	
Characteristic curve:	3850 ppm/K	
Long term stability:	Maximal drift = 0.04% after 1000h at 130°C	
Response time ($t_{63\%}$):	Water (v=0.4 m/s)	0.12 s
	Air (v=1m/s)	3 s
Self heating:	Water (v=0 m/s)	38 mW/K
	Air (v=0 m/s)	4 mW/K
Dimensions:	2 x 1.2 x 0.4 mm (LxWxT)	
Tolerance:	DIN EN 60751 F 0,3 (class B) (+/-0.12%)	
Soldering contacts:	Contacts lead free tinplated (96.5% Sn/3% Ag/0.5% Cu)	
Solderability*:	235°C ≤ 8s (DIN IEC 68 T2-20, Ta Meth. 1)	
Resistance to soldering heat:	260°C 10s (DIN IEC 68 T2-20, Ta Meth. 1A)	
Recommended applied current:	0.3mA (1000 Ohm)	

*The soldering process can influence accuracy

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