



P0KI.520.6W.B.010.S



Platinum temperature sensor with wires



For high temperatures



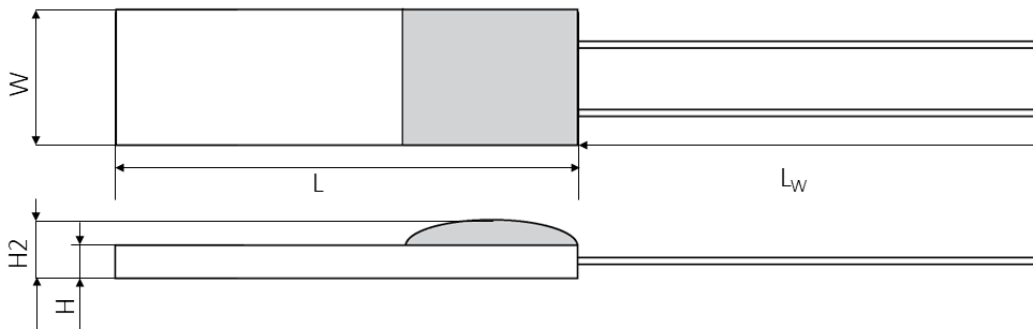
Benefits & characteristics



- High accuracy and stability
- Low self-heating
- Fast response time
- Vibration and temperature shock resistant
- Compact size and robust construction
- Dicing capability for custom integration



Illustration ¹⁾



¹⁾ for actual size see dimensions in order information

H = Substrate Height

H2 = Height

W = Width

L = Length

L_w = Wire length

Dimension tolerances:

W ±0.2 mm, L ±0.2 mm, H ±0.1 mm, H2 ±0.3 mm,
L_w (up to 30 mm) ±1 mm

Technical data

Operating temperature range:	-200 °C to +600 °C	
Nominal resistance:*	100 Ω at 0 °C	
Characteristics curve:*	3850 ppm/K	
Tolerance class: *	IEC 60751 F 0.3	iST reference
(dependent on temperature range)		B
Dimension (L x W x H):_	5.0 x 2.0 x 1.3 mm	
Connection:*	Pt/Ni-wire, Ø 0.2 mm, 10 mm long	

* Customer-specific alternatives available

Order Information

6W (Pt/Ni-wire, Ø 0.2 mm, 10 mm long)

Nominal Resistance	Size	Dimensions (L x W x H in mm) L ±0.2, W ±0.2, H ±0.1,	Class*	Order code	Product name (secondary reference)	Wire length in mm	Special
100 Ω	520	5.0 x 2.0 x 1.6	F0.15 (class B)	155815	P0K1.520.6W.B.010.S	10	dicing

Additional Documents

Application Note

Document name: ATP_E



Order Information

Platinum Sensor - Secondary reference



Material

P = Platinum

TCR

= Pt 3850 ppm/K G = Pt 3911 ppm/K
U = Pt 3750 ppm/K W = Pt 3850 ppm/K (extended operating temperature range in class A)

Resistance in Ω at 0°C

Size in mm

Operating temperature range

1	=	-50 °C to + 150 °C	6	=	-200°C to + 600 °C
2	=	-50 °C to + 200 °C	7	=	-200 °C to + 750 °C
3	=	-200 °C to + 300 °C	8	=	-200 °C to + 850 °C
4	=	-200 °C to + 400 °C	10	=	-70 °C to + 1000 °C

Connections

S	=	SIL	FK	=	Flat wire customer specific
I	=	Insulated wire	SW	=	Perpendicular wire
K	=	Extended wire	L	=	Insulated stranded wire
W	=	Wire	E	=	Enameled Cu-wire
FW	=	Flat wire	SE	=	Perpendicular enameled Cu-wire

Tolerance class

A	=	IEC 60751 F0.15	K	=	Customer-specific
B	=	IEC 60751 F0.3	P	=	Pair
C	=	IEC 60751 F0.6	G	=	Group
Y	=	IEC 60751 F0.1			

Wire length in mm

Special

T	=	Substrate thickness 0.25 mm	M	=	Metallized backside
D	=	Substrate thickness 0.38 mm	U	=	Inverted welding
R	=	Round housing	S	=	Special
W	=	Sintered powder			

P OK1. 520. 6 W. B. 010. S



Innovative Sensor Technology IST AG • Stegrütistrasse 14 • 9642 Ebnat-Kappel • Switzerland
+41 71 992 01 00 • 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 or product specifications without previous announcement 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 • All rights reserved.