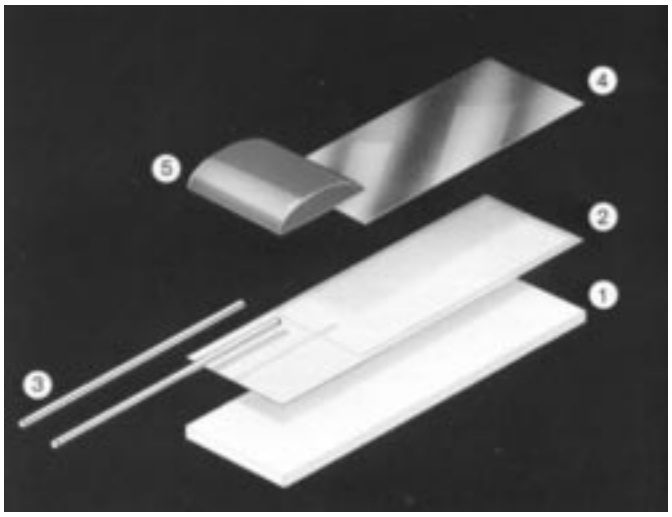
Thin Film Platinum Temperature Sensors



1=ceramic substrate
2=platinum film
3=lead wire (platimum-coated nickel)
4=glass protection for platinum film
5=glass protection for lead wires

Thin Film Platinum Temperature sensor elements for the measurement of temperature from -50 to 600°C. These sensors offer high reliability, tight tolerance, excellent long-term stability, accuracy and resistance to vibration and thermal shock. Applications include industrial temperature probes, HAVC, automotive and thermostat etc.

Type	Dimensions (WxLxT)	Nom. Resistance at 0°C			Temp. Range
		100 Ω	500 Ω	1000 Ω	DIN B
PTFA	2.9x10.0x1.4	●	●	●	-50 to 600°C
PTFB	2.0x10.0x1.4	●	●	●	-50 to 600°C
PTFC	2.0x2.4x1.4	●		●	-50 to 600°C
PTFD	2.0x5.0x1.4	●	●		-50 to 600°C
PTFE	3.9x5.0x1.4	●	●	●	-50 to 600°C
PTFN	1.7x5.0x1.1	●			-50 to 600°C
PTSB	2.4x10.0x1.4	●	●	●	-40 to 150°C
PTSE	3.7x6.0x1.4	■	■	■	-40 to 150°C
PTNK	3.7x8.4x1.1	●	●	●	-40 to 150°C
PTRA	dia 4.5x13.0	●	●	●	-50 to 600°C
PTRB	dia 2.8x13.0	●	●	●	-50 to 600°C
PTRN	dia 2.2x7.5	●	●	●	-50 to 400°C
PTDA(1)	dia 4.5x13.0	●	●	●	-50 to 600°C
PTDB(1)	dia 2.8x13.0	●	●	●	-50 to 600°C

(1) Duplex Assemblies

Table 1

Class	Nom. Resistance Ro at 0°C	Temperature Coefficient TK from 0°C to 100°C	Temp. Range
Z	Ro± 0.012 %	3850± 2 ppm/°C	-50 to 200°C
P	Ro± 0.024 %	3850± 3 ppm/°C	-50 to 200°C
T	Ro± 0.04 %	3850± 4 ppm/°C	-50 to 400°C
(DIN)A	Ro± 0.06 %	3850± 5 ppm/°C	-50 to 400°C
(DIN) B	Ro± 0.12 %	3850± 13 ppm/°C	-50 to 600°C
C	Ro± 0.24 %	3850± 13 ppm/°C	-50 to 600°C

Table 2

Special developments include high temperature version up to 1000°C and low temperature version at -200°C. Please ask for details

Ordering

PT	F	C	101	B	000
1	2	3	4	5	6

Order Code Makeup

1) Platinum Series
2) Form F=Flat, D= Cylindrical Duplex, R= Cylindrical, N= Chip, S= Comatel Leads
3) Size (ie 2.0mm x 2.4mm) (see table 1)
4) Nominal Resistance Tolerance (101-100Ω, 501=500Ω 102= 1000Ω)
5) Class B according to DIN IEC 751 (see table 2)
6) Special Version coding

Example shown, PTFC101B000 is
PT sensor, flat, 2.0 x 2.4 x 1.4mm, 100Ω, DIN Class B, standard sensor.

Physical Characteristics