

# THIN-FILM PLATINUM TEMPERATURE SENSOR

## PT SERIES

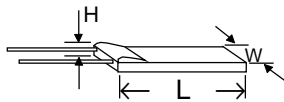


- Industry's lowest cost and widest selection!
- Precision performance, excellent stability, fast response
- Wide resistance range: 100Ω, 500Ω, 1000Ω
- Dual sensors available in a single package (Type PTD)
- Meets DIN 43760 and IEC 751
- Choice of temperature ratings (up to +640°C)

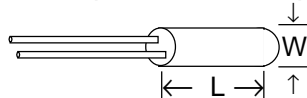
### SPECIAL MODIFICATIONS (Consult Factory)

- Non-standard resistance values up to 2000Ω
- Surface Mount chip elements
- Insulated extension wires
- Assembly into stainless steel probes (PTS Series)
- MIL-Spec Group A & B environmental testing

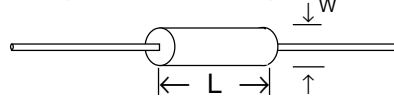
#### TYPE PTF - FLAT ELEMENT



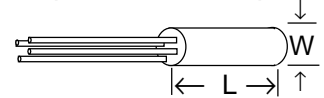
#### TYPE PTR - CYLINDRICAL (ceramic encased)



#### TYPE PTA - AXIAL LEAD (ceramic encased)



#### TYPE PTD - DUAL ELEMENT (ceramic encased)



NEW →

RCD Type	Dimensions			Standard Resistance Values	Typical Response Time (sec.)				Self Heating Air 1m/s (°C/mW)
	W ±.016 [.4]	L ±.02 [.5]	H Max.		Water 0.2 m/s		Air 1 m/s		
					50%	90%	50%	90%	
PTF1/2	.062 [1.6]	.125 [3.2]	.047 [1.2]	100	.08	.25	4	11	.17
PTF1	.080 [2]	.400 [10]	.055 [1.4]	100,500,1000	.2	.5	5	13	.17
PTF4	.080 [2]	.100 [2.5]	.047 [1.2]	100	.07	.2	3	10	.30
PTF5	.080 [2]	.200 [5]	.055 [1.4]	100, 500, 1000	.1	.3	5	15	.25
PTR1	.125 [3.2]	.530±.062	N/A	100,500,1000	1.5	6	20	66	.12
PTR2	.120 [3]	.250±.031	N/A	100	1.3	5	15	50	.16
PTA1	.125 [3.2]	.600±.04	N/A	100,500,1000	1.5	6	20	66	.12
PTA2	.120 [3]	.250±.031	N/A	100	1.3	5	15	50	.16
PTD1	.170 [4.3]	.675±.062	N/A	2x100, 2x500, 2x1000	2	8	25	80	.12

### SPECIFICATIONS

Operating Temperature Range	Type L: -50 to +200°C (low temp, economy) Type H: -50 to +500°C (high temp, industrial) Type T: -50 to +640°C (highest temp, specialty)
TCR (0°C to 100°C)	+3850ppm/°C
Stability	<0.1°C typ. drift after 1000 hours at Max Temp
Insulation	10MΩ Min. @ 25°C, 1 MΩ Min. @ Max. Temp.
Capacitance (1 KHz)	<10 pF
Inductance	Essentially non-inductive (<0.1 μH)

### RESISTANCE AND INTERCHANGEABILITY

°C	Resistance	Tolerance			
		.5 DIN	DIN	1.5 DIN	2 DIN
-50	.803	±.25°C	±.55°C	±.85°C	±1.1°C
0	1.000	±.15°C	±.3°C	±.45°C	±.6°C
+100	1.385	±.35°C	±.8°C	±1.2°C	±1.6°C
+200	1.758	±.55°C	±1.3°C	±2.0°C	±2.6°C
+300	2.120	±.75°C	±1.8°C	±2.7°C	±3.6°C
+400	2.470	±.95°C	±2.3°C	±3.5°C	±4.6°C
+500	2.809	±1.15°C	±2.8°C	±4.2°C	±5.6°C

### TOLERANCES (B is standard)

DIN 43760	Letter Code	Resistance Tolerance (@ 0°C)	Temperature Tolerance (@ 0°C)
.5 DIN	A	.06%	.15°C
DIN	B	.12%	.3°C
1.5 DIN	L	.2%	.5°C
2 DIN	C	.25%	.6°C
4 DIN	D	.5%	1.3°C
5 DIN	E	.6%	1.5°C

### P/N DESIGNATION: PTF2 H □ - 1001 - D T W

RCD Type \_\_\_\_\_

Temperature Rating: L, H, or T \_\_\_\_\_

Option Codes: (leave blank if standard) \_\_\_\_\_

4-Digit Resis. Code (at 0° C): 3 signif. digits & multiplier (1000=100Ω, 5000=500Ω, 1001=1KΩ) \_\_\_\_\_

Tolerance @ 0°C: See tolerance table for codes ("B" is std) \_\_\_\_\_

Packaging: B = Bulk (standard) \_\_\_\_\_

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable) \_\_\_\_\_