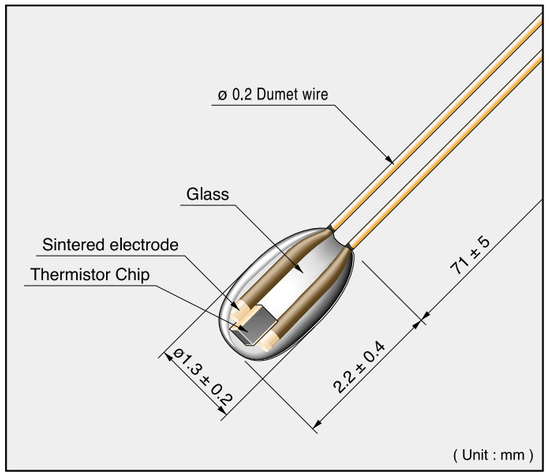
PSB-S3 THERMISTOR



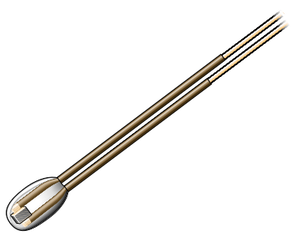
Features

- Medium size ø 1.3mm is used for applications which require fast response.
- Glass-sealed bead provides heat resistance and high stability.
- Chip type thermistor element is used.Chip-mounting, glass-sealing and all measuring processes are fully automated and which assures uniform in quality. It also enable to provide competitive price and high volume.
- Suitable for instruments and other applications requiring low power and high reliability.
- Dumet wire is copper clad FeNi alloy wire. Upon customers request, solder plating, nickel plating, polyimide coating, polyimide tube attachment and vinyl tube attachment are available.

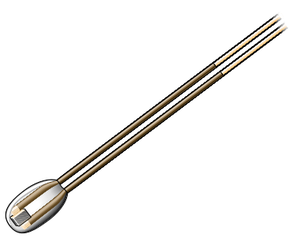
Standard Specifications

Item \ Type	Gold Electrode Type	Silver Palladium Electrode Type
Insulation resistance (between lead and glass)	Min. 10MΩ (50V d.c.)	Min. 10MΩ (50V d.c.)
Thermal time constant (in still air)	5 sec. (3.5 sec. ~ 6.5 sec.)	5 sec. (3.5 sec. ~ 6.5 sec.)
Dissipation constant (in still air)	0.7 ~ 0.9 mW/°C	0.7 ~ 0.9 mW/°C
Operating temperature range	-50°C ~ +300°C	-50°C ~ +120°C

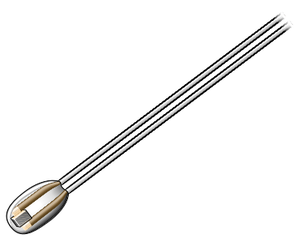
Options



Polyimide tube attachment for insulation. (Max. temp. 250°C)
Vinyl tube attachment for insulation. (Max. temp. 100°C)



Polyimide coating for insulation. (Max. temp. 200°C)



Solder plating for easier soldering.

Nickel plating against oxidation.

Electrical Characteristics for Standard PSB-S3 Thermistors

Gold Electrode Type

Model	Nominal Zero-Power Resistance	B-value	R / T Curve
PB3 – 36 – SD1	R 0 = 6 kΩ ± 1.0 %	B 0 / 100 = 3390 K ± 2.0 %	A
PB3 – 36 – SD2	R 0 = 6 kΩ ± 2.5 %		
PB3 – 36 – SD3	R 0 = 6 kΩ ± 5.0 %		
PB3 – 36 – SD4	R 25 = 2.186 kΩ ± 1.0 %		
PB3 – 36 – SD5	R 25 = 2.186 kΩ ± 2.5 %		
PB3 – 36 – SD6	R 25 = 2.186 kΩ ± 5.0 %		
PB3 – 43 – SD1	R 0 = 30 kΩ ± 1.0 %	B 0 / 100 = 3450 K ± 2.0 %	C
PB3 – 43 – SD2	R 0 = 30 kΩ ± 2.5 %		
PB3 – 43 – SD3	R 0 = 30 kΩ ± 5.0 %		
PB3 – 43 – SD4	R 25 = 10.74 kΩ ± 1.0 %		
PB3 – 43 – SD5	R 25 = 10.74 kΩ ± 2.5 %		
PB3 – 43 – SD6	R 25 = 10.74 kΩ ± 5.0 %		
PT3 – 51F – SD1	R 100 = 3.3 kΩ ± 1.0 %	B 0 / 100 = 3970 K ± 2.0 %	D
PT3 – 51F – SD2	R 100 = 3.3 kΩ ± 2.5 %		
PT3 – 51F – SD3	R 100 = 3.3 kΩ ± 5.0 %		
PT3 – 51F – SD4	R 25 = 49.12 kΩ ± 1.0 %		
PT3 – 51F – SD5	R 25 = 49.12 kΩ ± 2.5 %		
PT3 – 51F – SD6	R 25 = 49.12 kΩ ± 5.0 %		
PT3 – 25E2 – SD1	R 200 = 0.55 kΩ ± 1.0 %	B100 / 200 = 4300 K ± 3.0 %	E
PT3 – 25E2 – SD2	R 200 = 0.55 kΩ ± 2.5 %		
PT3 – 25E2 – SD3	R 200 = 0.55 kΩ ± 5.0 %		
PT3 – 25E2 – SD4	R 100 = 6.282 kΩ ± 1.0 %		
PT3 – 25E2 – SD5	R 100 = 6.282 kΩ ± 2.5 %		
PT3 – 25E2 – SD6	R 100 = 6.282 kΩ ± 5.0 %		
PT3 – 312 – SD1	R 200 = 1 kΩ ± 1.0 %	B100 / 200 = 4537 K ± 3.0 %	F
PT3 – 312 – SD2	R 200 = 1 kΩ ± 2.5 %		
PT3 – 312 – SD3	R 200 = 1 kΩ ± 5.0 %		
PT3 – 312 – SD4	R 100 = 13.06 kΩ ± 1.0 %		
PT3 – 312 – SD5	R 100 = 13.06 kΩ ± 2.5 %		
PT3 – 312 – SD6	R 100 = 13.06 kΩ ± 5.0 %		

Silver Palladium Electrode Type

Model	Nominal Zero-Power Resistance	B-value	R / T Curve
PT3 – 36F – %	R 25 = 2.1 kΩ ± 1.0 %	B 25 / 85 = 3850 K ± 1.0 %	I
PX3 – 41C – %	R 25 = 5 kΩ ± 1.0 %	B 25 / 85 = 3300 K ± 1.0 %	J
PX3 – 42H – %	R 25 = 10 kΩ ± 1.0 %	B 25 / 85 = 3435 K ± 1.0 %	K
PX3 – 51A – %	R 25 = 40 kΩ ± 1.0 %	B 25 / 85 = 3535 K ± 1.0 %	L
PX3 – 51G – %	R 25 = 58.5 kΩ ± 1.0 %	B 25 / 85 = 3630 K ± 1.0 %	M

I-V Curves

Gold Electrode Type