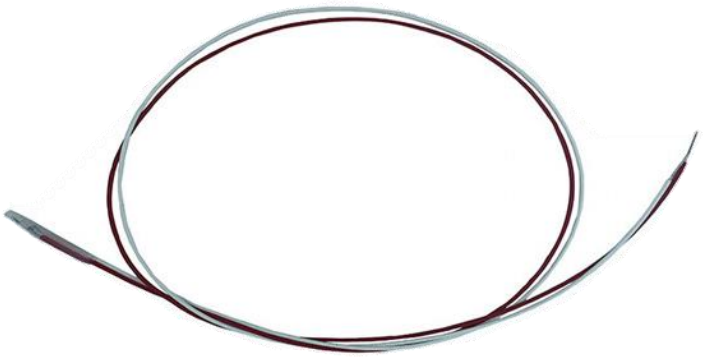
SST-RPT100C1

RTD sensor



PRODUCTS FEATURES

- 2~200KΩThe whole series of resistance value are available (optional)
- UL1332 AWG24 wire
- White fiberglass tube – 350mm
- Operating temperature up to 200°C

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1. Technical parameters

1.1 Electrical characteristics

Item	Sym.	Test conditions	Min.	Nom.	Max.	Unit
(Resistance At 0℃)	R0	Ta=0℃±0.05℃ P_T≦0.1mW	99.88	100	100.12	Ω
Response Time-In liquid	τ	25℃→100℃ T1=25+(100-25)*63.2%=63.2℃	-	-	15	Sec
Insulation test	-	DC500 V 5sec	100	-	-	MΩ
Hi-pot test	-	3000 V AC 2mA	5			Sec

1.2 Ratings

Item	Specification	Unit
Product Working Temp.Range	-40~+200	℃

1.3 Mechanical test

Item	Pass criteria	Test conditions
Pull Test	NO loosening NO deformation	On the sensor lead 0.5 kg weight and keep at least 10 seconds
Drop Test-30mm Wire	Appearance should be no visible damage, performance test requirements	Drop on a 10mm thick wooden board from a height of 1m for 5 times
Bending test		Flex the lead wire with a force of 0.5N(0.1kg*f)to an angle of 90 deg for 3 times.

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1.4 Reliability Tests

Item	Pass criteria	Test conditions
High Temperature Storage	⊿R/R0≤±1% (Relative to the initial value)	100±3℃, 1000±24h Take out the product under normal recovery after 1H
low Temperature Storage		-40±3℃, 1000±24h Take out the product under normal recovery after 1H
Humidity test	⊿R/R0≤±1% Relative to the initial value	40 + 2 ℃, relative humidity 90% ~ 95% of the environment to place 1000 h, remove sufficient to remove surface water droplets and recovery under normal 1H
In air	⊿R/R0≤±1% Relative to the initial value	Order: room 25℃, high temperature to 100 ℃±2℃ for 10min -- room 25℃ for 5min -- low -30℃±2℃ for 10min -- room 25℃ for 5min, circulation after 20 times, take back 1H at room temperature

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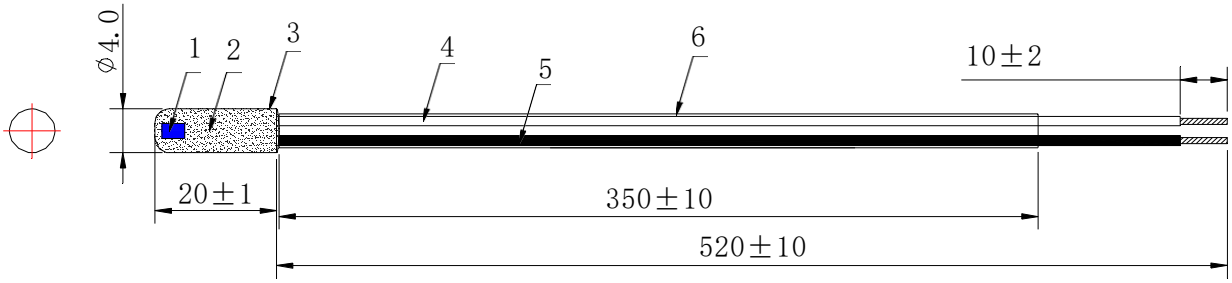
2. Mechanical dimension



№	Part name	Specification description	Q, TY
1	Resistance	PT100, B class, (R0 = 100Ω ±0.3°C)	1 pcs
2	Epoxy	High temperature epoxy resin	-
3	The shell	Φ4.0*20 Stainless steel shell	1 pcs
4	The wire	UL1332 AWG24 200°C 300V White wire	1 pcs
5	The wire	UL1332 AWG24 200°C 300V Black wire	1 pcs
6	Tube	White Fiberglass Sleeving 350mm	1 pcs

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3. Product use conditions and the matters needing attention

1) The maximum service temperature of product use, the maximum power to wait, all in accordance with the specification requirements homework, shall not exceed the scope of specification
2) Product mobile, installation must be handled with care not pulling force, attention to protect the head NTC resistance
3) Cap occur deformation, oxidation etc. Phenomenon, do not use, so as not to affect the temperature accuracy.
4) Product appearance found deformation, breakage, do not use, lest affect performance
5) Avoid from exceeding radical temperature change, which is beyond operation temperature range
6) Do not add excessive vibration shocking pressure
7) Avoid from excessive pulling and bending of the lead wire
8) Do not use in corrosiveness gas atmosphere (CO2 ,NH3, SOx, NOx) beyond the designated condition.) Do not use at the place where the sensor touches the electrolytic, brine, acid, alkaline and organic solvent beyond the designated condition.
9) As far as possible avoid using in water, high humidity and other have rot environment.
10) Through the negative temperature coefficient temperature sensor current will cause element own fever and produce measurement error, therefore need before use this factor into consideration
11) Product storage time more than a year, in order to ensure the use of normal and precision is not affected, recommends testing after put into use.
12) If there is anything remaining unclear, please contact to our company's sales supervisor/engineer

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