# SSRTD- Coil Winding Silicon Patch RTD with Lead Wire

**TEMPERATURE SENSOR**

**SSRTD-** Silicon patch surface RTDs are specifically designed to measure the winding temperature in electric motors , generators and other applications. Silicone patch RTDs are installed on uneven surface for temperature measurement , these RTDs offer flexibility to measure temperature accurately on uneven surfaces.

**Key Features**

- Flexible Silicon Patch to install on round or uneven surface.
- Available in pt100, pt1000, and Ni120 ohm.
- Custom Size patch to cover entire surface temperature.
- Available with Silicon Adhesive back.

**Technical Specification:**

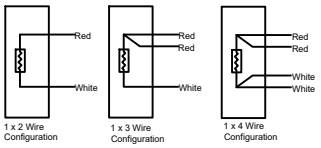
**Insulation Resistance** : 100 MG Ohms @ 250 vdc
**Response Tim**e : <3 Sec in circulating water @ 3ft/sec
**Accuracy** : As per IEC60751 (See tolerance chart)
**Self Heating Error**: < 0.30°F (0.17°C)
**Alpha Curve** : IEC 0.00385
**Time Constant** : < 3 sec
Patch Thickness : 0.060"

**RTD Wire Configuration**

**2 Wire:** In 2 wire RTDs, one lead wire is connected to each wire of the RTD element. 2 Wire RTDs are an economical option for the applications where high accuracy is not required. Since there is no compensation wire, the accuracy of RTD can be affected if long lead wire is used.

**3 Wire** : 3 wire RTDs are the most common type of RTDs used in the industry. In 3 three-wire Rtd 1 wire is connected to the one side of the RTD element, and on the other side, 2 wires are connected to compensate for the resistance. With compensating wire, accuracy is very close to the element accuracy at the termination end.

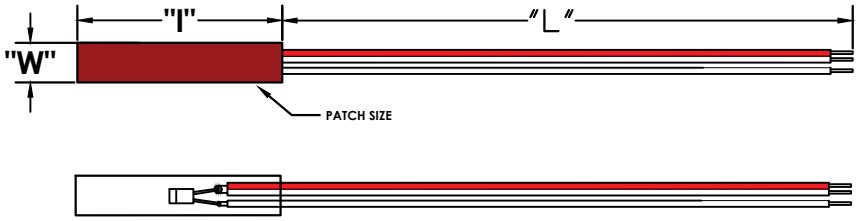
**4 wire:** 4 wire RTDs are highly accurate. In 4 wire RTDs 2 wires are connected to each side of the RTD element. With additional wire on each side of the RTD element, the output at the termination is highly accurate. 4 wire RTDs are recommended where high accuracy and long lead wire is required.




**Our RTD class offerings and Tolerance as per IEC60751 (pt100)**

| Tolerance Class | Temperature Range °C | | Tolerance | Tolerance |
|---|---|---|---|---|
| | Wire Wound | Thin Film | Values Ω | values °C |
| AA | -50 TO +250 | 0 TO +150 | ±0.04 | ± ( 0.1 + 0.0017 \|t\|) |
| A | -100 TO +450 | -30 TO +300 | ±0.06 | ± ( 0.15 + 0.002 \|t\| ) |
| B | -196 TO +600 | -50 TO +500 | ±0.12 | ± ( 0.3 + 0.005 \|t\| ) |
| C | -196 TO +600 | -50 TO +600 | ±0.23 | ± ( 0.6 + 0.01 \|t\| ) |
| a \| t \| = modulus of temperature in °C without regard to sign | | | | |
| For 1/10 DIN B RTD is not standardize. The only accuracy defined is 1/10 of Class B accuracy at 0°C = 0.03°C | | | | |

| Temperature | Class B± | Class A± | Class AA± (1/3 DIN B) | Class 1/10 DIN B± |
|---|---|---|---|---|
| -50° C | 0.55 | 0.25 | 0.19 | 0.060 |
| 0° C | 0.30 | 0.15 | 0.10 | 0.030 |
| 100° C | 0.80 | 0.35 | 0.27 | 0.070 |
| 200° C | 1.30 | 0.55 | 0.44 | 0.120 |
| 250° C | 1.55 | 0.65 | 0.53 | 0.160 |
| 300° C | 1.80 | 0.75 | 0.61 | 0.220 |
| 350° C | 2.05 | 0.85 | 0.70 | - |
| 400° C | 2.30 | 0.95 | 0.78 | - |
| 450° C | 2.55 | 1.05 | 0.87 | - |
| 500° C | 2.80 | 1.15 | 0.95 | - |
| 550° C | 3.05 | 1.25 | 1.04 | - |
| 600° C | 3.30 | 1.35 | 1.12 | - |
| 650° C | 3.55 | 1.45 | 1.21 | - |




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| KPTRTD | PT | A | S | 03 | 1214 | 98I | 5 |

| 1. RTD TYPE | |
|---|---|
| CODE | |
| PT | Pt100 Ohm, 0.00385, Coefficient |
| PTK | Pt1000 Ohm, 0.00385 Coefficient |
| NI | Ni120 Ohm, 0.00672 Curve Class B Only (Only Available in Low temp) |

| 2. RTD ACCURACY | |
|---|---|
| CODE | |
| B | Class "B" (For Ni120) |
| A | Class "A" (For PT100) |

| 3. SENSOR ELEMENT | |
|---|---|
| CODE | |
| S | Single Element |

| 4. WIRE CONFIGURATION | |
|---|---|
| CODE | |
| 02 | 2 wire (Red White) |
| 03 | 3 wire (Red/Red/White) STD |
| 04 | 3 wire (Red/White/White) STD |
| 05 | 4 wire(Red/Red/White/White) |

| 5. Patch Size (W x I) | |
|---|---|
| CODE | |
| 121 | ½" x 1.0" |
| 382 | ⅜" x 2.0" |
| 123 | ½" x 3.0" |

| 6. LEAD LENGTH (L) |
|---|
| Lead Length - use "I" for inches and "M" for millimetre |

| 7. WIRE TYPE | |
|---|---|
| CODE | |
| 5 | PFA (260° C) 24 Awg. Conductor |
| 09 | Specify if any other |

| 8. ADHESIVE | |
|---|---|
| CODE | |
| Leave blank for Non Adhesive | |
| AD | Adhesive Back |