

RKC® Product Announcement <<W-ST50A>>

Date: February 2011

This letter is to announce that the connector lead for ST-50/ST-51 (Adhesive type surface temperature sensor) has been improved by redesigning. For the details, please refer to the descriptions below.

Schedule :

W-ST50A (Improved version) : Now available

W-ST50 (Former version) : To be discontinued on 31st August 2011

Descriptions :

● Connector

1. Sliding type connector :

Easy to connect ST-50/ST-51 Adhesive type surface temperature sensor.

2. Surface heat-resistant temperature is improved from 100°C to 230°C.

● Lead wire

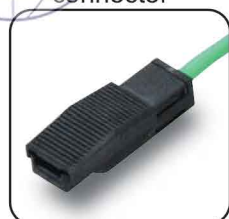
1. Green silicon rubber coating :

The color of the cable is changed from black to green to accordance with IEC.

How to connect ST-50/ST-51 sensor



Sliding type connector



⚠ Connector for DP-350 has been redesigned.



Former version :
W-ST50-1000-2C



Improved version
W-ST50A-1000-3C

Model Code :

W-ST50 (Former version)

Model Code	Contents
W-ST50-1000-2C	Connector lead for DP-350/500 connection (1m)
W-ST50-1000-6C/B	Connector lead for DP-700 connection (1m)
W-ST50-1000-Y3	Y-sharped terminal lug type Connector lead (1m)



W-ST50A (Improved version)

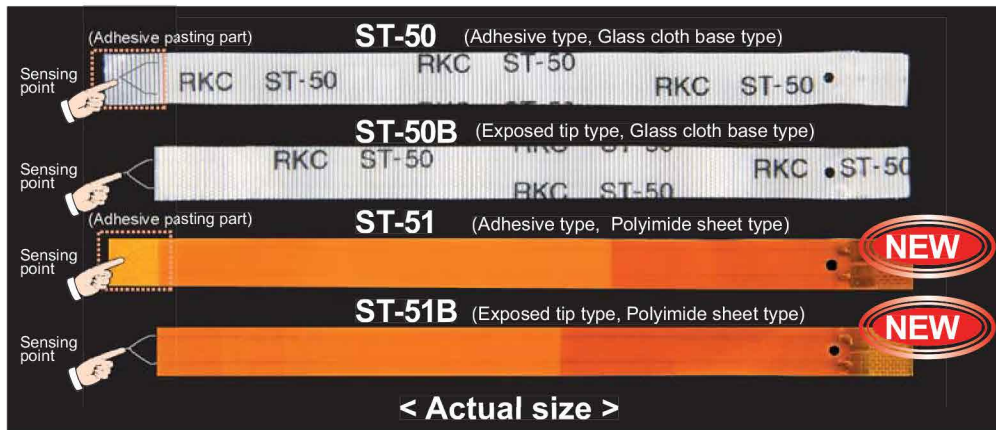
Model Code	Contents
W-ST50A-1000-3C	Connector lead for DP-350/500 connection (1m)
W-ST50A-1000-6C	Connector lead for DP-700 connection (1m)
W-ST50A-1000-Y3	Y-sharped terminal lug type Connector lead (1m)
W-ST50A-1000-TM1	Miniature-thermocouple connector plug (CMP-01) type Connector lead (1m)
W-ST50A-1000-N	Solder type Connector lead
W-ST50A-1000-C	Non-treatment type Connector lead

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Easy temperature measurement of tiny objects and gaps

Adhesive and exposed tip type temperature sensors (Thermocouple Type K)



ST-50/51 Series

ST-50

Max. 300°C

RoHS compliant

Adhesive type, Glass cloth base type

ST-50B

Exposed tip type, Glass cloth base type

ST-51

Adhesive type, Polyimide sheet type

ST-51B

Exposed tip type, Polyimide sheet type

Easy temperature measurement

Temperature can be measured by simply applying the tip of the sensor to a tiny object or inserting the sensor into tiny gaps.

No dust generation (Polyimide sheet type)

Durable adhesive tape

The adhesive tape can be repeatedly applied to and detached from various types of surfaces.

<Durability of adhesive tape>

- Up to 150°C (302°F) : Repeated use and detachment is available.
- Up to 200°C (393°F) : Repeated use and detachment is available.

When temperature stays above 150°C (302°F), repeated use and detachment is available.

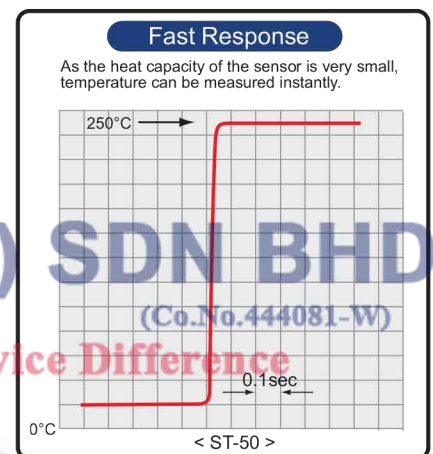
- Up to 250°C (482°F)

When temperature stays above 200°C (392°F), repeated use and detachment is available.

- Higher than 250°C (482°F)

Adhesive part will be burnt. Repeated use is not available.

* Frequency of repeated use can be different based on the working conditions.



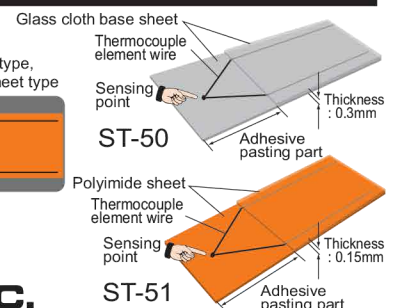
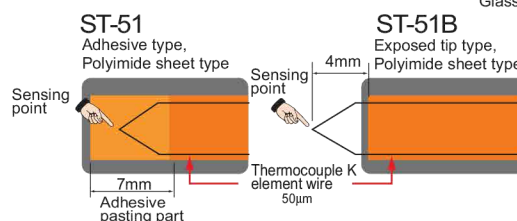
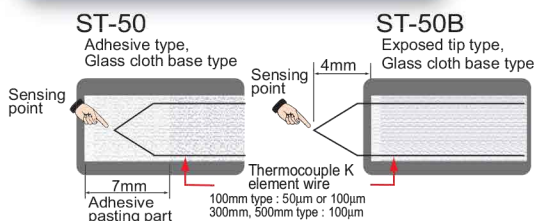
Sensor Specifications

Sheet Material	ST-50/50B : Glass cloth base sheet ST-51/51B : Polyimide sheet
Max. Temperature	300°C (577°F)
Thermocouple	Type K
Size (Length x Width x Thickness)	ST-50 : 107 x 6.7 x 0.3 mm ST-50-300 : 307 x 6.7 x 0.3 mm ST-50-500 : 507 x 6.7 x 0.3 mm ST-50B : 104 x 6.7 x 0.3 mm ST-50B-300 : 304 x 6.7 x 0.3 mm ST-50B-500 : 504 x 6.7 x 0.3 mm ST-51 : 107 x 6.7 x 0.15 mm ST-51B : 104 x 6.7 x 0.15 mm
Element wire diameter	ST-50/50B : 50μm/100μm ST-50-300/500, ST-51-300/500 : 100μm ST-51/51B : 50μm

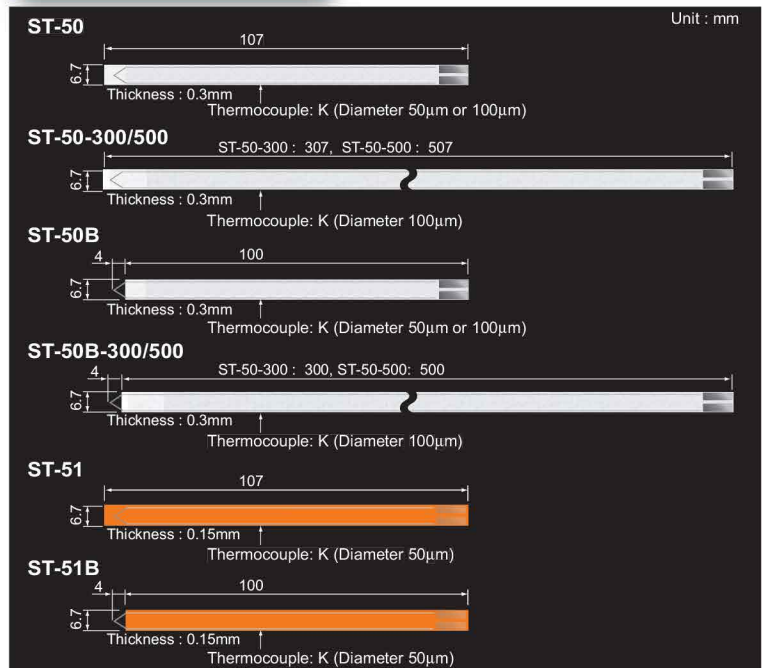
	Response time		Resistance value (With cable 1m)	Accuracy *
	Response of 95.0%	Response of 63.0%		
ST-50/51 (50μm element wire)	0.4 sec (Metal surface)	0.04 sec (Metal surface)	51Ω	±0.3% ±1°C
ST-50 (100μm element wire)	0.9 sec (Metal surface)	0.2 sec (Metal surface)	17Ω	±0.5% ±1°C
ST-50-300 (100μm element wire)	0.9 sec (Metal surface)	0.2 sec (Metal surface)	41Ω	±0.5% ±1°C
ST-50-500 (100μm element wire)	0.9 sec (Metal surface)	0.2 sec (Metal surface)	66Ω	±0.5% ±1°C

* Accuracy when temperature on metal surface is 100°C (212°F).

Sensing Point Dimensions



External Dimensions



Sensor Model Code

■ ST-50 Adhesive type, Glass cloth base type

ST-50 (Length : 107mm, Element Wire Diameter 50μm)
5 pieces per set

ST-50-100-D (Length : 107mm, Element Wire Diameter 100μm)
5 pieces per set

ST-50-300 (Length : 307mm, Element Wire Diameter 100μm)
1 piece per set

ST-50-500 (Length : 507mm, Element Wire Diameter 100μm)
1 piece per set

■ ST-50B Exposed tip type, Glass cloth base type

ST-50B-100-04 (Length : 104mm, Element Wire Diameter 50μm)
5 pieces per set

ST-50B-100-04-D (Length : 104mm, Element Wire Diameter 100μm)
5 pieces per set

ST-50B-300-04 (Length : 304mm, Element Wire Diameter 100μm)
1 piece per set

ST-50B-500-04 (Length : 504mm, Element Wire Diameter 100μm)
1 piece per set

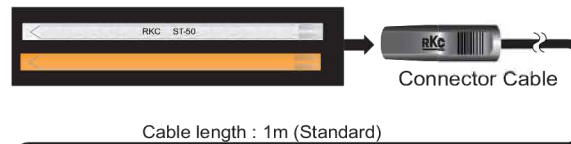
■ ST-51 Adhesive type, Polyimide sheet type

ST-51-100-C (Length : 107mm, Element Wire Diameter 50μm)
5 pieces per set

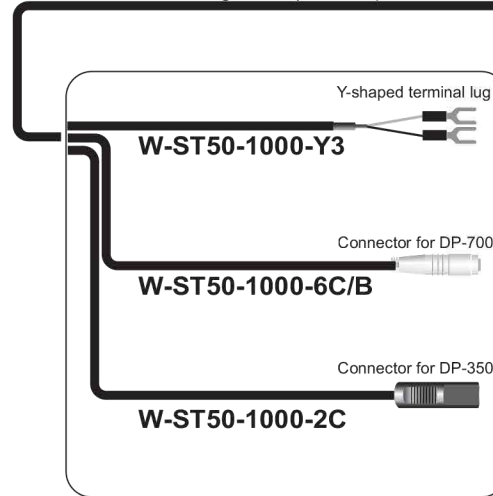
■ ST-51B Exposed tip type, Polyimide sheet type

ST-51B-100-04-C (Length : 104mm, Element Wire Diameter 50μm)
5 pieces per set

Connector Cable



Cable length : 1m (Standard)



Panel Mounting Type Indicator
AG500, etc (Type K input)



Handheld Thermometer



Specifications

Connector material : Poly-carbonate

Max. Temperature : 100°C (212°F)

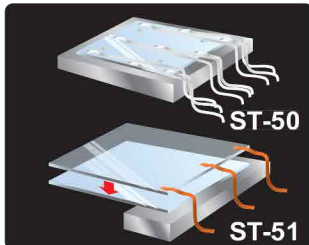
Cable : ø0.1 x 30 Extended cable, Standard 1m

Material (Cable) : Silicon coated

Connector size : Approx. 40 x 12 x 13.5 mm (Length x Width x Thickness)

Applications

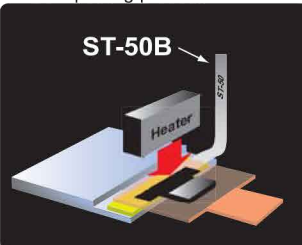
- Temperature distribution on the surface of solar cells.



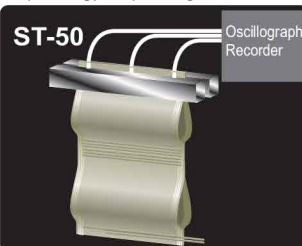
- Temperature distribution on the surface of solar cells.



- Temperature inspection for COF pasting process



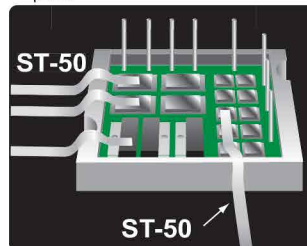
- Temperature distribution of heater (Sealing) for packing machine.



- Temperature inspection for LED



- Temperature inspection for electronic parts



- Before operating this product, read the instruction manual carefully to avoid incorrect operation.
- This product is intended for use with industrial machines, test and measuring equipment. It is not designed for use with medical equipment.
- If it is possible that an accident may occur as a result of the failure of the product or some other abnormality, an appropriate independent protection device must be installed.

Caution for the export trade

All transactions must comply with laws, regulations, and treaties.

Caution for imitated products

As products imitating our product now appear on the market, be careful that you don't purchase these imitated products. We will not warrant such products nor bear the responsibility for any damage and/or accident caused by their use.

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