

# 热敏电阻温度传感器

## THERMISTOR SENSORS

### [用途] [Applications]

		[系列] [Series]
室用空调机 Room air conditioner	室内温度、室外温度、排风口、热交换器用 Room temp., External air, Outlet air, Heat exchanger	AC系列 AC Series
车用空调机 Car air conditioner	室内温度、室外温度、排风口、热交换器用、蒸发器用 Room temp., External air, Outlet air, Heat exchanger, Evaporator	CA系列 CA Series
表面温度 Surface temperature	表面温度检测用 Surface temperature	ST系列 ST Series
热水器、温水器 Hot & instant boiler	温水用、冷水用 Hot water, Cool water	IB, HB系列 IB, HB Series
洗涤、干燥机用传感器 Washing & Drying machine	干燥温度 Drying temp.	WD系列 WD Series
微波炉 Microwave oven	炉内温度检测用 Oven temp.	MW系列 MW Series
冰箱 Refrigerator	冷藏室温度 Cold Strage	RF系列 RF Series
温水冲洗马桶 Toilet	马桶座圈用、冲洗水用、温风用 Toilet seat, Washing water, Drying air	WT系列 WT Series

※关于WT系列的详情, 请垂询。  
※对于其他方面的用途, 也请垂询。

※Please contact us for detail of WT series, and other applications.

### ■型号构成

DTN - C 503 F 3U

(1) (2) (3) (4) (5)

- ①表示热敏电阻传感器的记号 ②热敏电阻元件类型记号  
 ③标称电阻值...表示25°C时的电阻值  
 前2位表示电阻值的有效数字, 第3位表示有效数字后“0”的个数。单位为Ω。

- ④电阻值容许偏差记号±(%)

记号	F	G	H	J	K	X
电阻值容许偏差	±1.0	±2.0	±3.0	±5.0	±10.0	特殊容许偏差

- ⑤B值记号。

### 室用空调机用传感器

#### ■特点

- 耐湿性能优异。
- 小型、热响应快。

ACA-35



- 电阻值 ..... R<sub>25</sub>=15kΩ±3%(薄片)
- B值(3T) ..... B<sub>25/50</sub>=3950K±2%  
B<sub>25/85</sub>=3989K
- 使用温度范围 ..... -30°C~+100°C
- 用途 ..... 气温用
- 热响应时间常数(空气中) ..... 50sec.

ACA-30



- 电阻值 ..... R<sub>25</sub>=5kΩ±3%(薄片)
- B值(3T) ..... B<sub>25/50</sub>=3950K±2%  
B<sub>25/85</sub>=3989K
- 使用温度范围 ..... -30°C~+100°C
- 用途 ..... 遥控用
- 热响应时间常数(空气中) ..... 25sec.

※关于R-T数据, 请参阅本公司主页。

※关于热敏电阻温度传感器的使用环境条件, 请垂询本公司。

### ■Part number system

DTN - C 503 F 3U

(1) (2) (3) (4) (5)

- ①Thermistor ②Thermistor element  
 ③Expressed resistance in Ω (at 25°C). The first two digits are significant, and the third is the number of zeros.

- ④Resistance tolerance ±(%)

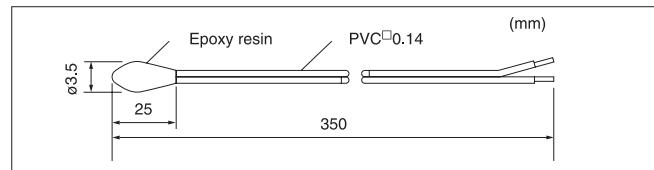
Symbol	F	G	H	J	K	X
Resistance tolerance	±1.0	±2.0	±3.0	±5.0	±10.0	Special Tolerance

- ⑤B value

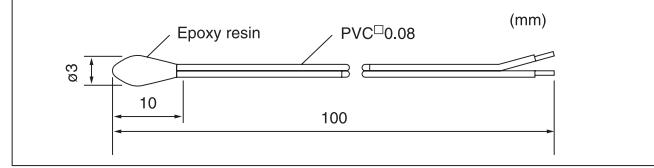
### Sensor for room air conditioner

#### ■Features

- Moisture resistant.
- Small with quick temperature response.



- Resistance ..... R<sub>25</sub>=15kΩ±3% (Flake chip)
- B value (3T) ..... B<sub>25/50</sub>=3950K±2%  
B<sub>25/85</sub>=3989K
- Operating temperature range ..... -30°C~+100°C
- Application ..... Air temperature
- Thermal time constant (in air) ..... 50sec.



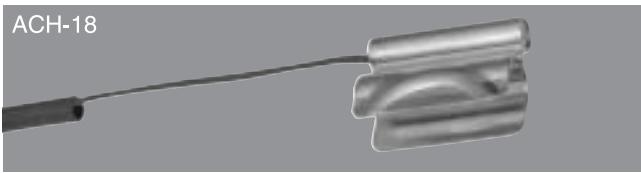
- Resistance ..... R<sub>25</sub>=5kΩ±3% (Flake chip)
- B value (3T) ..... B<sub>25/50</sub>=3950K±2%  
B<sub>25/85</sub>=3989K
- Operating temperature range ..... -30°C~+100°C
- Application ..... Remote control
- Thermal time constant (in air) ..... 25sec.

※Regarding R-T data, please refer to our Home Page.

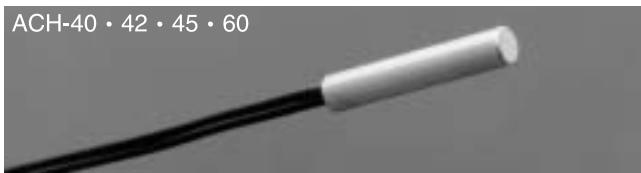
※Please consult us regarding the operating conditions of NTC Thermistor sensors.

# 热敏电阻温度传感器

## THERMISTOR SENSORS



- 电阻值 .....  $R_{25}=15k\Omega \pm 2\%$  (薄片)
- B值 (3H) .....  $B_{25/50}=3450K \pm 2\%$   
 $B_{25/85}=3486K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 用途 ..... 热交换器用
- 热响应时间常数(水中) ..... 5sec.



- 电阻值 .....  $R_{25}=10k\Omega \pm 3\%$  (薄片)
- B值 (3T) .....  $B_{25/50}=3950K \pm 2\%$   
 $B_{25/85}=3989K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 用途 ..... 热交换器用
- 热响应时间常数(水中) ..... 5sec.



- 电阻值 .....  $R_{90}=5k\Omega \pm 3\%$  (薄片)
- B值 (3U) .....  $B_{25/50}=3950K \pm 3\%$   
 $B_{25/85}=4025K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +130^{\circ}\text{C}$
- 用途 ..... 排水管用
- 热响应时间常数(水中) ..... 5sec.

### 汽车空调机用传感器 Sensor for car air conditioner

#### ■特点

- 耐湿性能优异。
- 小型、热响应快。



- 电阻值 .....  $R_0=4.852k\Omega \pm 5\%$  (薄片)
- B值 (6D) .....  $B_{25/50}=3930K \pm 3\%$   
 $B_{25/85}=3941K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 用途 ..... 蒸发器用
- 热响应时间常数(水中) ..... 4sec.

### 表面温度传感器 Sensor for measuring surface temperature

#### ■特点

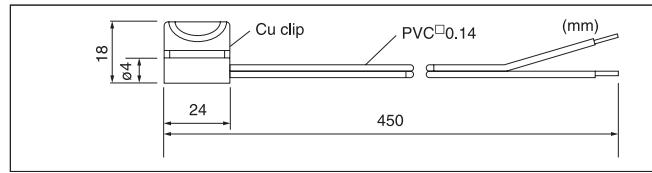
- 采用金属吸热面，热响应快。
- 安装时可采用螺栓固定。



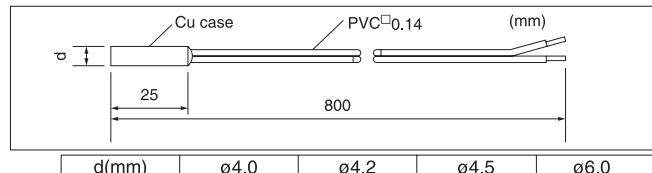
- 电阻值 .....  $R_{25}=22k\Omega \pm 3\%$  (薄片)
- B值 (3U) .....  $B_{25/50}=3950K \pm 2\%$   
 $B_{25/85}=4025K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 热响应时间常数(铝块上) ..... 36sec.

※关于R-T数据，请参阅本公司主页。

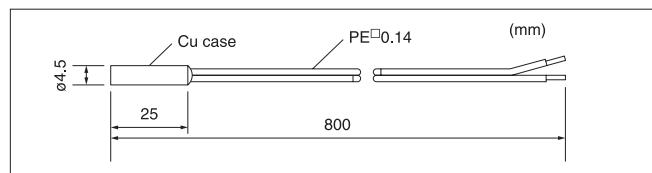
※关于热敏电阻温度传感器的使用环境条件，请垂询本公司。



- 电阻值 .....  $R_{25}=15k\Omega \pm 2\%$  (Flake chip)
- B值 (3H) .....  $B_{25/50}=3450K \pm 2\%$   
 $B_{25/85}=3486K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 用途 ..... Heat exchanger
- 热响应时间常数 (in water) ..... 5sec.



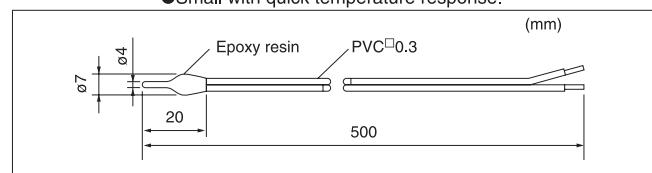
- 电阻值 .....  $R_{25}=10k\Omega \pm 3\%$  (Flake chip)
- B值 (3T) .....  $B_{25/50}=3950K \pm 2\%$   
 $B_{25/85}=3989K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 用途 ..... Heat exchanger
- 热响应时间常数 (in water) ..... 5sec.



- 电阻值 .....  $R_{90}=5k\Omega \pm 3\%$  (Flake chip)
- B值 (3U) .....  $B_{25/50}=3950K \pm 3\%$   
 $B_{25/85}=4025K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +130^{\circ}\text{C}$
- 用途 ..... Delivery pipe
- 热响应时间常数 (in water) ..... 5sec.

#### ■Features

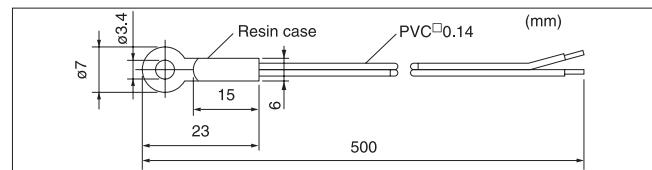
- Moisture resistant.
- Small with quick temperature response.



- 电阻值 .....  $R_0=4.852k\Omega \pm 5\%$  (Flake chip)
- B值 (6D) .....  $B_{25/50}=3930K \pm 3\%$   
 $B_{25/85}=3941K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 用途 ..... Evaporator
- 热响应时间常数 (in water) ..... 4sec.

#### ■Features

- Metal contact surface yields fast temperature response.
- Can be fastened with a screw.



- 电阻值 .....  $R_{25}=22k\Omega \pm 3\%$  (Flake chip)
- B值 (3U) .....  $B_{25/50}=3950K \pm 2\%$   
 $B_{25/85}=4025K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- Thermal time constant (on A $\ell$  block) ..... 36sec.

※Regarding R-T data, please refer to our Home Page.

※Please consult us regarding the operating conditions of NTC Thermistor sensors.

# 热敏电阻温度传感器

## THERMISTOR SENSORS

STS-40



- 电阻值 .....  $R_{25}=10k\Omega \pm 1\%$  (薄片)
- B值(3H) .....  $B_{25/50}=3450K \pm 1\%$   
 $B_{25/85}=3486K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +110^{\circ}\text{C}$
- 热响应时间常数(铝块上) ..... 18sec.  
(空气中) ..... 80sec.

STS-50



- 电阻值 .....  $R_{25}=10k\Omega \pm 3\%$  (GA型)
- B值(3HG) .....  $B_{25/50}=3465K \pm 3\%$   
 $B_{25/85}=3502K$
- 使用温度范围 .....  $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$
- 热响应时间常数(铝块上) ..... 22sec.

STS-51



- 电阻值 .....  $R_{25}=10k\Omega \pm 5\%$  (CTH)
- B值(3TV) .....  $B_{25/50}=3820K \pm 3\%$   
 $B_{25/85}=3792K$
- 使用温度范围 .....  $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$
- 热响应时间常数(铝块上) ..... 27sec.

### 热水器用传感器

#### ■特点

- 耐热冲击性能优异。
- 热响应快。
- 不锈钢外壳，耐腐蚀性能优异。

IBS-25



- 电阻值 .....  $R_{50}=3.485k\Omega \pm 2.5\%$  (GR型)
- B值(6QR) .....  $B_{25/50}=3423K \pm 1\%$   
 $B_{25/85}=3468K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +105^{\circ}\text{C}$
- 热响应时间常数(水中) ..... 0.8sec.

### 温水器用温度传感器 Sensor for hot boiler

#### ■特点

- 耐湿性能优异。

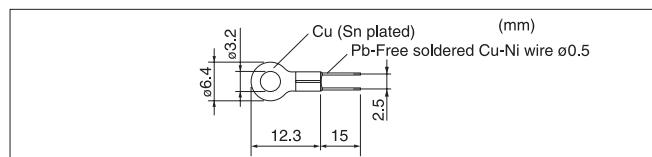
HBS-45



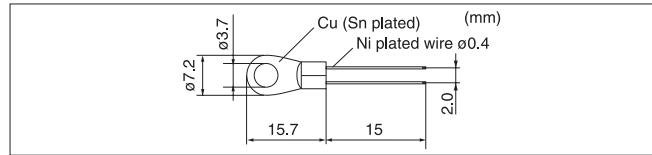
- 电阻值 .....  $R_{25}=11k\Omega \pm 3\%$  (薄片)
- B值(3T) .....  $B_{25/50}=3950K \pm 2\%$   
 $B_{25/85}=3989K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- 热响应时间常数(水中) ..... 8sec.

※关于R-T数据，请参阅本公司主页。

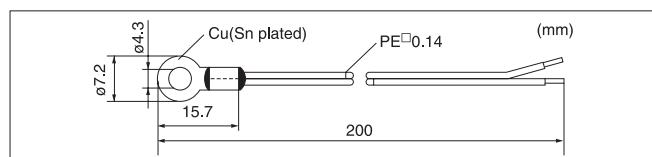
※关于热敏电阻温度传感器的使用环境条件，请垂询本公司。



- Resistance .....  $R_{25}=10k\Omega \pm 1\%$  (Flake chip)
- B value (3H) .....  $B_{25/50}=3450K \pm 1\%$   
 $B_{25/85}=3486K$
- Operating temperature range .....  $-30^{\circ}\text{C} \sim +110^{\circ}\text{C}$
- Thermal time constant (on A  $\ell$  block) ..... 18sec.  
(in air) ..... 80sec.



- Resistance .....  $R_{25}=10k\Omega \pm 3\%$  (GA Type)
- B value (3HG) .....  $B_{25/50}=3465K \pm 3\%$   
 $B_{25/85}=3502K$
- Operating temperature range .....  $40^{\circ}\text{C} \sim +150^{\circ}\text{C}$
- Thermal time constant (on A  $\ell$  block) ..... 22sec.

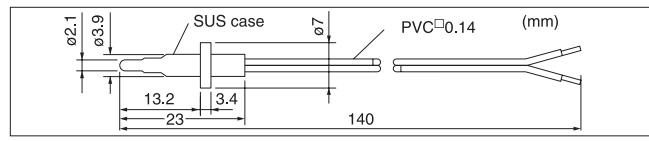


- Resistance .....  $R_{25}=10k\Omega \pm 5\%$  (CTH)
- B value (3TV) .....  $B_{25/50}=3820K \pm 3\%$   
 $B_{25/85}=3792K$
- Operating temperature range .....  $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$
- Thermal time constant (on A  $\ell$  block) ..... 27sec.

### Sensor for instant boiler

#### ■Features

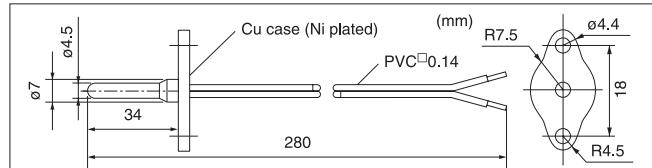
- Resistant to heat shock.
- Quick temperature response.
- Stainless steel case makes it safe to use with food.



- Resistance .....  $R_{50}=3.485k\Omega \pm 2.5\%$  (GR TYPE)
- B value (6QR) .....  $B_{25/50}=3423K \pm 1\%$   
 $B_{25/85}=3468K$
- Operating temperature range .....  $-30^{\circ}\text{C} \sim +105^{\circ}\text{C}$
- Thermal time constant (in water) ..... 0.8sec.

#### ■Features

- Moisture resistant.



- Resistance .....  $R_{25}=11k\Omega \pm 3\%$  (Flake chip)
- B value (3T) .....  $B_{25/50}=3950K \pm 2\%$   
 $B_{25/85}=3989K$
- Operating temperature range .....  $-30^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- Thermal time constant (in water) ..... 8sec.

※Regarding R-T data, please refer to our Home Page.

※Please consult us regarding the operating conditions of NTC Thermistor sensors.

# 热敏电阻温度传感器

## THERMISTOR SENSORS

### 洗涤干燥机用传感器

#### ■特点

- 耐热性能优异。
- 耐湿性能优异。

WDS-60



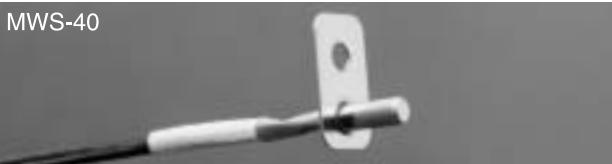
- 电阻值 .....  $R_{100}=3.3k\Omega \pm 3\%$  (GR型)
- B值(6PR) .....  $B_{25/100}=3999K \pm 2\%$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim 150^{\circ}\text{C}$
- 热响应时间常数(水中) ..... 10sec.

### 微波炉用传感器

#### ■特点

- 耐热性能优异。
- 热响应快。

MWS-40



- 电阻值 .....  $R_{200}=1k\Omega \pm 3\%$  (GA型)
- B值(4RG) .....  $B_{25/50}=4050K \pm 2\%$   
 $B_{25/85}=4126K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +300^{\circ}\text{C}$  (仅传感器部)
- 热响应时间常数(水中) ..... 20sec.

MWS-13



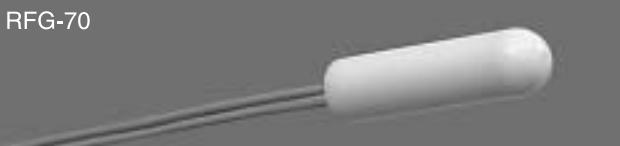
- 电阻值 .....  $R_{200}=1k\Omega \pm 3\%$  (GA型)
- B值(4RG) .....  $B_{25/50}=4050K \pm 2\%$   
 $B_{25/85}=4126K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim +260^{\circ}\text{C}$  (仅传感器部)
- 热响应时间常数(水中) ..... 20sec.

### 冰箱用传感器

#### ■特点

- 耐湿性能优异。

RFG-70



- 电阻值 .....  $R_0=6.35k\Omega \pm 3\%$  (薄片)
- B值(6W) .....  $B_{0/25}=3823K \pm 2\%$   
 $B_{20/0}=3738K$
- 使用温度范围 .....  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- 用途 ..... 冰箱用(冷冻、除霜、冷藏用)
- 热响应时间常数(水中) ..... 25sec.

### 冲洗马桶用传感器

#### ■特点

- 热灵敏性极高。
- 不锈钢外壳，耐腐蚀性能优异。

WTS-15



- 电阻值 .....  $R_{37}=29.46k\Omega \pm 3\%$  (GR型)
- B值(6PR) .....  $B_{25/50}=3948K \pm 1.5\%$   
 $B_{25/85}=3984K$
- 使用温度范围 .....  $-30^{\circ}\text{C} \sim 105^{\circ}\text{C}$
- 热响应时间常数(水中) ..... 0.5sec.

※关于R-T数据，请参阅本公司主页。

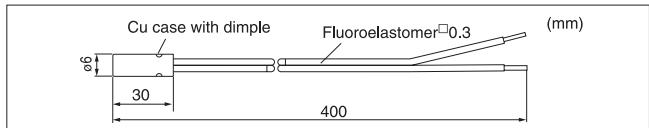
※关于热敏电阻温度传感器的使用环境条件，请垂询本公司。

SUNSTAR自动化 <http://www.sensor-ic.com/> TEL: 0755-83376489 FAX:0755-83376182 E-MAIL: szss20@163.com

### Sensor for Washing & Drying machine

#### ■Features

- Resistance to high temperature.
- Moisture resistant.

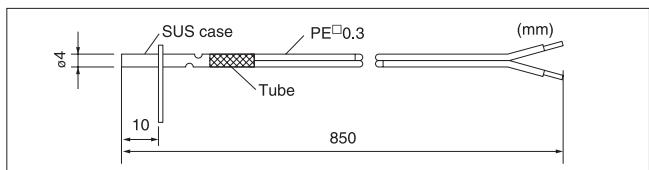


- Resistance .....  $R_{100}=3.3k\Omega \pm 3\%$  (GR TYPE)
- B value (6PR) .....  $B_{25/100}=3999K \pm 2\%$
- Operating temperature range .....  $-30^{\circ}\text{C} \sim 150^{\circ}\text{C}$
- Thermal time constant (in water) ... 10sec.

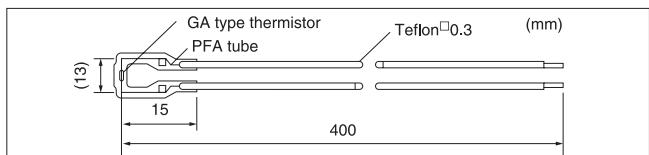
### Sensor for microwave oven

#### ■Features

- Resistant to high temperature.
- Quick temperature response.



- Resistance .....  $R_{200}=1k\Omega \pm 3\%$  (GA Type)
- B value (4RG) .....  $B_{25/50}=4050K \pm 2\%$   
 $B_{25/85}=4126K$
- Operating temperature range .....  $-30^{\circ}\text{C} \sim +300^{\circ}\text{C}$  (Sensor only)
- Thermal time constant (in water) ... 20sec.

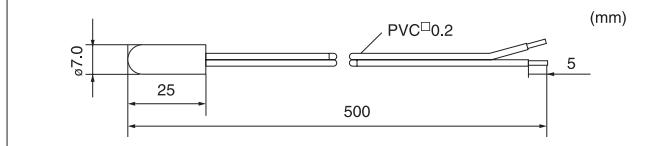


- Resistance .....  $R_{200}=1k\Omega \pm 3\%$  (GA Type)
- B value (4RG) .....  $B_{25/50}=4050K \pm 2\%$   
 $B_{25/85}=4126K$
- Operating temperature range .....  $-30^{\circ}\text{C} \sim +260^{\circ}\text{C}$  (Sensor only)
- Thermal time constant (in water) ... 20sec.

### Sensor for refrigerator

#### ■Features

- Moisture resistant.

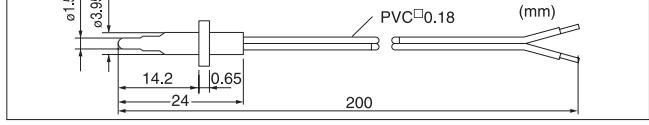


- Resistance .....  $R_0=6.35k\Omega \pm 3\%$  (Flake chip)
- B value (6W) .....  $B_{0/25}=3823K \pm 2\%$   
 $B_{20/0}=3738K$
- Operating temperature range .....  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- Application ..... Refrigerator (freezer, defrosting, cold storage)
- Thermal time constant (in water) ... 25sec.

### Sensor for Bidet

#### ■Features

- Ultra quick temperature response.
- Stainless steel case makes it safe to use with food.



- Resistance .....  $R_{37}=29.46k\Omega \pm 3\%$  (GR TYPE)
- B value (6PR) .....  $B_{25/50}=3948K \pm 1.5\%$   
 $B_{25/85}=3984K$
- Operating temperature range .....  $-30^{\circ}\text{C} \sim 105^{\circ}\text{C}$
- Thermal time constant (in water) ... 0.5sec.

※Regarding R-T data, please refer to our Home Page.

※Please consult us regarding the operating conditions of NTC Thermistor sensors.