

[高精度引脚型]


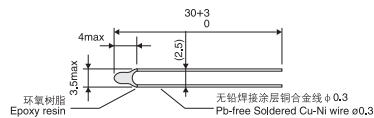

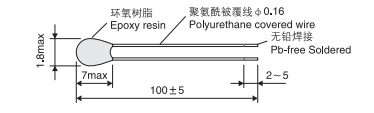

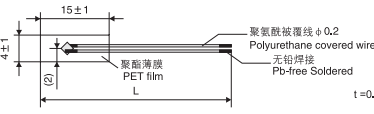

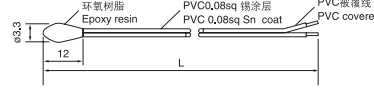

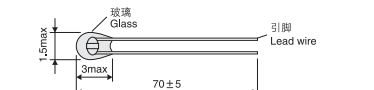

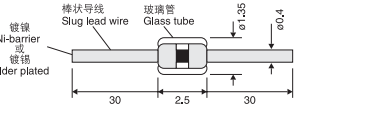

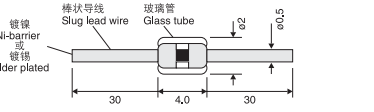
高精度系列产品，可用于高精度电路的温度补偿或温度控制、温度测量上，要求电阻值及B值的容许偏差极小的产品。

[High precision leaded type]

The high precision has very tight resistance and B value tolerances to allow very accurate temperature control or compensation.

形状 Type

尺寸 Dimensions (mm)

系列名 Series	形状 Construction	使用温度范围 Operating Temp.range
径向 引脚型 Radial Leaded Type	  环氧树脂 Epoxy resin 无铅焊接涂覆铜合金线 ϕ 0.3 Pb-free Soldered Cu-Ni wire ϕ 0.3	-40°C ~ +110°C
	  环氧树脂 Epoxy resin 聚氨酯被覆线 ϕ 0.16 Polyurethane covered wire 无铅焊接 Pb-free Soldered	-40°C ~ +110°C
	  聚氨酯被覆线 ϕ 0.2 Polyurethane covered wire ϕ 0.2 无铅焊接 Pb-free Soldered 聚酯薄膜 PET film t=0.8max	-40°C ~ +85°C
	L=25mm PH08-*****-25 L=50mm PH08-*****-50 L=75mm PH08-*****-75 L=100mm PH08-*****-100	
	  环氧树脂 Epoxy resin PVC0.08sq 锡涂层 PVC 0.08sq Sn coat PVC被覆线 PVC covered wire	-20°C ~ +80°C
L=25mm BN35-*****-25 L=50mm BN35-*****-50 L=75mm BN35-*****-75 L=100mm BN35-*****-100 L=125mm BN35-*****-125 L=150mm BN35-*****-150		
轴向 引脚型 Axial Leaded Type	  玻璃 Glass 引脚 Lead wire	-40°C ~ +300(150)°C
	  镍 Ni-barrier 玻璃管 Glass tube 焊锡 Solder plated 棒状导线 Slug lead wire	-40°C ~ +300(150)°C
  镍 Ni-barrier 玻璃管 Glass tube 焊锡 Solder plated 棒状导线 Slug lead wire	-40°C ~ +300(150)°C	

NTC热敏电阻

CH25、RH16、PH08、BN35系列

CH25, RH16, PH08, BN35 Series

- 散热系数...CH25: $\delta=0.7\text{mW}/^\circ\text{C}$, RH16: $\delta=0.6\text{mW}/^\circ\text{C}$, PH08: $\delta=0.8\text{mW}/^\circ\text{C}$, BN35: $\delta=2.4\text{mW}/^\circ\text{C}$
- 额定功率...CH25: P=59.5mW, RH16: P=51mW, PH08: P=48mW, BN35: P=132mW

- Heat dissipation constant...CH25: $\delta=0.7\text{mW}/^\circ\text{C}$, RH16: $\delta=0.6\text{mW}/^\circ\text{C}$, PH08: $\delta=0.8\text{mW}/^\circ\text{C}$, BN35: $\delta=2.4\text{mW}/^\circ\text{C}$
- Power rating...CH25: P=59.5mW, RH16: P=51mW, PH08: P=48mW, BN35: P=132mW

系列名 Series	型号 Type	电阻值 Resistance				B值 B25/50 B Value	B值 B25/85 B Value	热时间常数 Thermal time constant t (sec.)
		R25	电阻值容许偏差 Resistance tolerance					
			±1%	±2%	±3%			
CH25	3G501**	500Ω	○	○	○	3,450K ± 1%	3,488K	14
	3G102**	1kΩ	○	○	○	3,450K ± 1%	3,488K	12
	6D102**		○	○	○	3,930K ± 1%	3,941K	14
	3G202**	2kΩ	○	○	○	3,450K ± 1%	3,488K	14
	6D202**		○	○	○	3,930K ± 1%	3,941K	12
	3G302**	3kΩ	○	○	○	3,450K ± 1%	3,488K	12
	6D302**		○	○	○	3,930K ± 1%	3,941K	14
	3H502**	5kΩ	○	○	○	3,450K ± 1%	3,486K	14
	6E502**		—	○	○	3,950K ± 1%	4,001K	12
	3H103**	10kΩ	○	○	○	3,450K ± 1%	3,486K	12
	6B103**		○	○	○	3,950K ± 1%	3,989K	14
	6B203**	20kΩ	○	○	○	3,950K ± 1%	3,989K	12
	3U303**	30kΩ	○	○	○	3,950K ± 1%	4,025K	14
	3U503**	50kΩ	○	○	○	3,950K ± 1%	4,025K	14
	3U104**	100kΩ	○	○	○	3,950K ± 1%	4,025K	12
	4L204**	200kΩ	—	○	○	4,550K ± 1%	4,629K	14
	4L304**	300kΩ	—	○	○	4,550K ± 1%	4,629K	14
4L504**	500kΩ	—	○	○	4,550K ± 1%	4,629K	12	
RH16	3G202**	2kΩ	○	○	○	3,450K ± 1%	3,488K	6
	6D502**	5kΩ	○	○	○	3,930K ± 1%	3,941K	6
	3H103**	10kΩ	○	○	○	3,450K ± 1%	3,486K	6
	6E103**		—	○	○	3,950K ± 1%	4,001K	6
	3U503**	50kΩ	○	○	○	3,950K ± 1%	4,025K	6
	3U803**	80kΩ	○	○	○	3,950K ± 1%	4,025K	6
	4A104**	100kΩ	—	○	○	4,020K ± 1%	4,099K	6
4L304**	300kΩ	—	○	○	4,550K ± 1%	4,629K	6	
PH08	3H103**	10kΩ	○	○	○	3,450K ± 1%	3,486K	6
	3U104**	100kΩ	○	○	○	3,950K ± 1%	4,024K	6
BN35	3H103**	10kΩ	○	○	○	3,450K ± 1%	3,486K	40
	3U104**	100kΩ	○	○	○	3,950K ± 1%	4,024K	40
	5B225**	2.2MΩ	—	—	○	5,200K ± 3%	5,290K	40

※关于R-T数据, 请参阅本公司主页。

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

GR15系列

GR15 Series

- 散热系数... $\delta=0.7\text{mW}/^\circ\text{C}$
- 热响应时间常数... $\tau=6\text{sec}$.
- 额定功率... P = 87mW (150°C耐热产品)
P = 192mW (300°C耐热产品)

- Heat dissipation constant... $\delta=0.7\text{mW}/^\circ\text{C}$
- Thermal time constant... $\tau=6\text{sec}$.
- Power rating... P=87mW(max temp.150°C)
P=192mW(max temp.300°C)

300°C耐热产品 300°C Heat resistance

系列名 Series	型号 Type	电阻值 Resistance				B值 B25/50 B Value	B值 B25/85 B Value
		R25	电阻值容许偏差 Resistance tolerance				
			±1%	±2%	±3%		
GR15	7A103**	10kΩ	○	○	○	4,397K ± 1%	4,369K
	6P493**	49.12kΩ	○	○	○	3,948K ± 1%	3,984K
	7C993**	98.63kΩ	○	○	○	4,036K ± 1%	4,074K
	7B104**	100kΩ	○	○	○	4,828K ± 1%	4,843K
	7D234**	231.4kΩ	○	○	○	4,207K ± 1%	4,254K
	5D105**	1MΩ	○	○	○	5,121K ± 1%	5,184K
	7E145**	1.388MΩ	○	○	○	4,460K ± 1%	4,537K
	5E106**	10MΩ	○	○	○	5,393K ± 1%	5,486K

※关于R-T数据, 请参阅本公司主页。

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

150°C耐热产品 150°C Heat resistance

系列名 Series	型号 Type	电阻值 Resistance				B值 B25/50 B Value	B值 B25/85 B Value
		R25	电阻值容许偏差 Resistance tolerance				
			±1%	±2%	±3%		
GR15	6S222**	2.186kΩ	—	○	○	3,386K ± 1%	3,419K
	3G302**	3kΩ	—	○	○	3,490K ± 1%	3,527K
	6Q542**	5.369kΩ	—	○	○	3,423K ± 1%	3,468K
	6Q852**	8.471kΩ	—	○	○	3,423K ± 1%	3,468K
	3H862**	8.563kΩ	○	○	○	3,477K ± 1%	3,519K
	6Q113**	10.74kΩ	—	○	○	3,423K ± 1%	3,468K
	6M373**	36.74kΩ	○	○	○	3,985K ± 1%	4,099K
	6N493**	48.70kΩ	○	○	○	3,935K ± 1%	4,030K

※关于R-T数据, 请参阅本公司主页。

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

GH13, GH20系列

- 散热系数 GH13 : $\delta = 1.3\text{mW}/^\circ\text{C}$
GH20 : $\delta = 1.8\text{mW}/^\circ\text{C}$
- 热响应时间常数 GH13 : $\tau = 14\text{sec.}$, GH20 : $\tau = 25\text{sec.}$
- 额定功率 GH13 : P=357mW (300°C耐热产品)
P=162mW (150°C耐热产品)
GH20 : P=495mW (300°C耐热产品)
P=225mW (150°C耐热产品)

300°C耐热产品 300°C Heat resistance

系列名 Series	型号 Type	R25	电阻值 Resistance			B值 B25/50 B Value	B值 B25/85 B Value
			电阻值容许偏差 Resistance tolerance				
			±1%	±2%	±3%		
GH13	3G202**	2kΩ	○	○	○	3,470K±1%	3,507K
	3G302**	3kΩ	○	○	○	3,470K±1%	3,507K
	6D502**	5kΩ	○	○	○	3,950K±1%	3,961K
	6P303**	30kΩ	○	○	○	3,948K±1%	3,984K
	3U104**	100kΩ	○	○	○	3,965K±1%	4,038K
	4R204**	200kΩ	—	○	○	4,050K±1%	4,126K
	4R304**	300kΩ	—	○	○	4,050K±1%	4,126K
4L504**	500kΩ	—	○	○	4,550K±1%	4,629K	
GH20	3G202**	2kΩ	○	○	○	3,470K±1%	3,507K
	3G302**	3kΩ	○	○	○	3,470K±1%	3,507K
	6D502**	5kΩ	○	○	○	3,950K±1%	3,961K
	6P203**	20kΩ	○	○	○	3,948K±1%	3,984K
	6P303**	30kΩ	○	○	○	3,948K±1%	3,984K
	3U503**	50kΩ	○	○	○	3,965K±1%	4,038K
	3U104**	100kΩ	○	○	○	3,965K±1%	4,038K
	4R204**	200kΩ	—	○	○	4,050K±1%	4,126K
	4R304**	300kΩ	—	○	○	4,050K±1%	4,126K
4L504**	500kΩ	—	○	○	4,550K±1%	4,629K	

※关于R-T数据, 请参阅本公司主页。

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

150°C耐热产品 150°C Heat resistance

系列名 Series	型号 Type	R25	电阻值 Resistance			B值 B25/50 B Value	B值 B25/85 B Value
			电阻值容许偏差 Resistance tolerance				
			±1%	±2%	±3%		
GH13	6F103**	10kΩ	○	○	○	3,450K±1%	3,466K
	3H103**		○	○	○	3,465K±1%	3,502K
	6E203**	20kΩ	—	○	○	3,965K±1%	4,016K
	6H503**	50kΩ	○	○	○	3,770K±1%	3,820K
GH20	6F103**	10kΩ	○	○	○	3,450K±1%	3,466K
	3H103**		○	○	○	3,465K±1%	3,502K

※关于R-T数据, 请参阅本公司主页。

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

※关于镀镍产品与镀锡产品的型号表示法

※For nickel or Tin plating

希望订购镀锡产品时, 请将“-”(连字符)改为“Z”即可。

Place a "Z" in place of the "-" (hyphen) when ordering Tin plated parts.

(例如) 镀镍产品: GA13-3H103**

(example) Nickel plated part : GA13-3H103**

镀锡产品: GA13Z3H103**

Tin plated part : GA13Z3H103**

对于镀锡产品, 无论上述耐热产品如何分类, 容许温度全都为150°C。

Please note Tin plated parts have a maximum heat resistances of 150°C.

【温度传感器使用注意事项】

[Caution in Thermistor Sensor usage]

请严格遵守以下事项, 否则可能会造成温度传感器损坏、使用设备损伤或引起误动作。

Due to the possibilities of destruction of the sensor, damage or miss use of equipment, please strictly follow below matter.

- ① 传感器是按不同用途分别进行设计的。若要用于规定以外的用途时, 请就使用环境条件与本公司联系洽谈。
- ② 设计设备时, 请进行传感器贴装评估试验, 确认无异常后再使用。
- ③ 请勿在过高的功率下使用传感器。
- ④ 由于自身发热导致电阻值下降时, 可能会引起温度检测精度降低、设备功能故障, 故使用时请参考散热系数, 注意传感器的外加功率及电压。
- ⑤ 请勿在使用温度范围以外使用。
- ⑥ 请勿施加超出使用温度范围上下限的急剧温度变化。
- ⑦ 将传感器作为装置的主控制元件单独使用时, 为防止事故发生, 请务必采取设置“安全电路”、“同时使用具有同等功能的传感器”等周全的安全措施。
- ⑧ 在有噪音的环境中使用时, 请采取设置保护电路及屏蔽传感器(包括导线)的措施。
- ⑨ 请勿施加过度的振动、冲击及压力。
- ⑩ 请勿过度拉伸及弯曲导线。
- ⑪ 请勿在绝缘部和电极间施加过大的电压。否则, 可能会产生绝缘不良现象。
- ⑫ 请勿在腐蚀性气体的环境(CI2、NH3、SOX、NOX)以及会接触到电解质、盐水、酸、碱、有机溶剂的场所中使用。
- ⑬ 使用传感器进行树脂成型加工时, 可能会因组成构件的应力导致传感器破坏, 故应对此加以充分确认。

- ① The sensor is designed for individual usage. When it is going to be used beyond the specified condition, please speak to your daily contact person for our products.
- ② Whenever designing the equipment, make sure to check sensor operation and if there is no lack of quality.
- ③ Do not use the sensor exceeding rated electric power.
- ④ Due to possibility of causing the decrease of the value of resistance with self heat and malfunction of the equipment or the precision decrease of the inspection temperature, carefully refer to the dissipation constant usage of electric power and voltage.
- ⑤ Do not use the sensor beyond operating temperature range.
- ⑥ Avoid from exceeding radical temperature change, which is beyond operating temperature range.
- ⑦ In case of independently use of the sensor as a main control of the device, make sure to design and devise through safety measures for [safe circuit] and [parallel use with same function sensor] etc, to prevent from accident.
- ⑧ Under the environment which receives the influence of electric noise, make sure to take countermeasure by installing a protection circuit and seal the sensor (including the lead wire).
- ⑨ Do not add excessive vibrating shocking pressure.
- ⑩ Avoid from excessive pulling and bending of the lead wire.
- ⑪ Do not impress excessive voltage in the insulated part and between the electrode. This might cause to occur the insulated malfunction.
- ⑫ Do not use in corrosiveness gas atmosphere (CI2, NH3, SOX, NOX) and at the place where the sensor touches the electrolytic, brine, acid, alkaline and organic solvent.
- ⑬ When you do processing (such as resin molding) by using thermistor sensor, please be reminded that sensor might be destroyed by the material or mismatch of it. If there is any others unclear point, please inquire to our company sales in-charge.

使用时若有其他不明之处, 请垂询本公司销售人员。