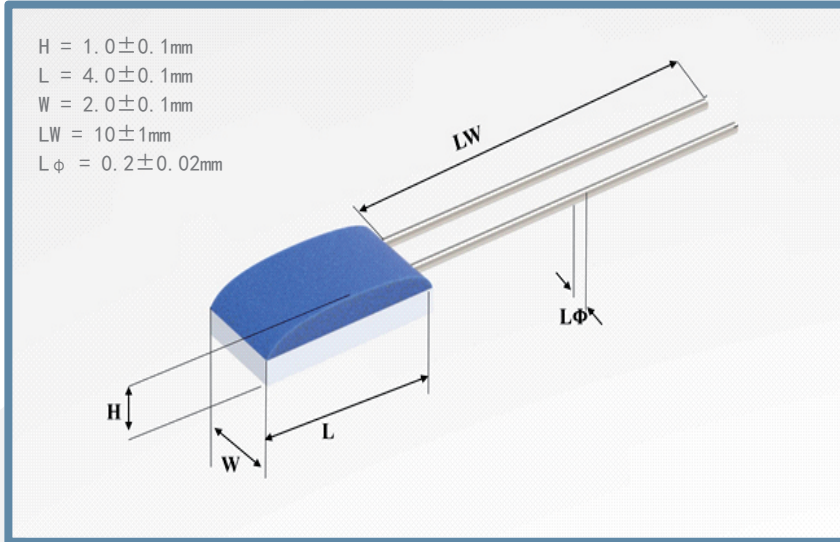


Thin film platinum temperature sensors Pt1000-2W elements

Size



General features

Performance parameters	Description
Type of components	Thin film platinum resistance
Component size	2.0mmx4.0mmx1.0mm 2.0mm*2.3mm*1.0mm 1.6mm*3.0mm*1.0mm
Lead specifications	Length:10mm diameter:0.2mm
Lead material	Platinum-nickel wire ; Silver target Pure Platinum ; Sterling silver
Lead tension	9N
Insulation impedance	>100M at20 ° C,>2M at500 ° C
TCR	3850ppm/ ° C
Working current	0.3~1mA
Long-term stability	After 1000 hours at 500 ° C, the resistance shift of R(0 ° C) is less than 0.04%
Response time	water current ($v=0.4\text{m/s}$) $\tau_{0.5}=0.05\text{s}$ $\tau_{0.9}=0.15\text{s}$ air current ($v=2\text{m/s}$) $\tau_{0.5}=3\text{s}$ $\tau_{0.9}=10\text{s}$
Self-heating coefficient	0 ° C 0.4 ° C/mW
Anti-vibration	Frequency acceleration 40g from 10 to 2000Hz
Impact resistant	8ms half sine wave acceleration 100g
Package	Vacuum plastic packaging
Customizable	Substrate size, base resistance lead specifications, can be provided on request

Product characteristics

- PT100-2W series thin film platinum resistors have the advantages of small size, high precision and good long-term stability.
- It has the characteristics of anti-vibration and anti-shock.
- The product can be subdivided into regular ultra low and high temperature series, covering the temperature range of -200 to 650 ° C.
- It can be used in many connection ways, such as resistance welding, argon arc welding, pressure welding, brazing and so on.
- Widely used in automotive, instrumentation, household appliances, new energy and other fields.

Selection

Type temperature criteria	Range of application	Classes	$R_0 (\Omega)$	Temperature range	Deviation
Pt1000-2W	-70 ~ +500°C	A	1000±0.06	-50 ~+300°C	$\pm(0.15+0.002 T)$
		B	1000±0.12	-70 ~+500°C	$\pm(0.3+0.005 T)$
		2B	1000±0.24	-70 ~+500°C	$\pm(0.6+0.01 T)$

Note * : the marked classes and temperature measurement accuracy refer to the IEC60751 standard.

T is the measured temperature.