

Platinum Resistance Temperature Detector

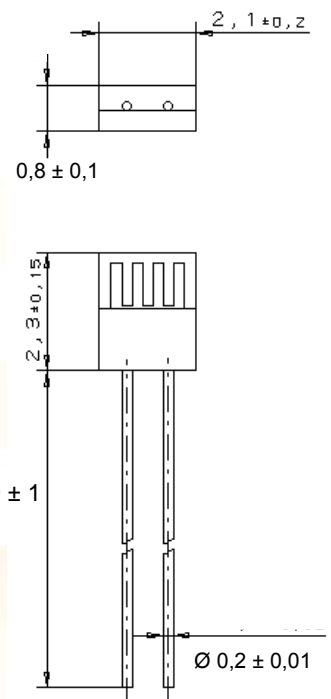
M 222 TC3750

M series PRTDs are designed for large volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications are Automotive, White goods, HVAC, Energy management, Medical and Industrial equipment.

Nominal Resistance R_0	Tolerance	Order No. Plastic bag
1000 Ohm at 0°C	class B	32 208 233
1000 Ohm at 0°C	class 2B	32 208 229

The measuring point for the nominal resistance is defined at 6 mm from the end of the sensor body.

Temperature range	-70°C to +500°C (continuous operation) (temporary use to 550 °C/ 750 hours possible)
Temperature coefficient	TCR = 3750 ppm/K
Leads	Pt clad Ni wire
Long-term stability	max. R_0 -drift 0.04% after 1000 h at 500°C
Vibration resistance	at least 40 g acceleration at 10 to 2000 Hz, depends on installation
Shock resistance	at least 100 g acceleration with 8ms half sine wave, depends on installation
Environmental conditions	unhoused for dry environments only
Insulation resistance	> 100 M Ω at 20°C; > 2 M Ω at 500°C
Self heating	0.4 K/mW at 0°C
Response time	water current ($v = 0.4$ m/s): $t_{0.5} = 0.05$ s; $t_{0.9} = 0.15$ s air stream ($v = 2$ m/s): $t_{0.5} = 3.0$ s; $t_{0.9} = 10.0$ s
Measuring current	1000 Ω : 0.1 to 0.3 mA (self heating has to be considered)
Note	Other tolerances, values of resistance and wire lengths are available on request.



We reserve the right to make alterations and technical data printed. All technical data serves as a guideline and does not guarantee particular properties to any products.

Heraeus Sensor Technology USA

1901 Route 130
North Brunswick, NJ 08902
Phone 732-940-4400 Fax 732-940-4445
Email info.hst-us@heraeus.com
www.hst-us.com