

Platinum Resistance Temperature Detector

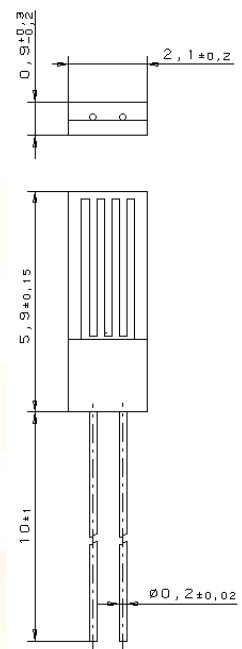
M 622 10kOhm

M series PRTDs are designed for large volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Due to the high resistance value of 10 kΩ the signal gain is excellent. Typical applications are found in White goods, HVAC, Medical and Industrial equipment.

Nominal Resistance R_0	Tolerance	Order No. Plastic bag
10000 Ohm at 0°C	DIN EN 60751, class B	32 208 711

The measuring point for the nominal resistance is defined at 8 mm from the end of the sensor body.

Spezifikation	DIN EN 60751 (according to IEC 751)
Temperature range	-70°C to +500°C (continuous operation) (temporary use to 550 °C possible) Tolerance class B: - 70 °C to + 500 °C
Temperature coefficient	TCR = 3850 ppm/K
Leads	Pt clad Ni wire
Longterm stability	tbd
Environmental conditions	unhoused for dry environments only
Insulation resistance	> 100 MΩ at 20 °C; > 2 MΩ 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
Self heating	0.3 K/mW at 0 °C
Response time	water current (v = 0.4 m/s): $t_{0.5} = 0.08$ s; $t_{0.9} = 0.25$ s air stream (v = 2 m/s): $t_{0.5} = 3.7$ s; $t_{0.9} = 11.5$ s
Measuring current	10000 Ω: 0.1 to 0.25 mA (self heating has to be considered)
Note	Other tolerances, values of resistance and wire lengths are available on request.
Status	objective



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.

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