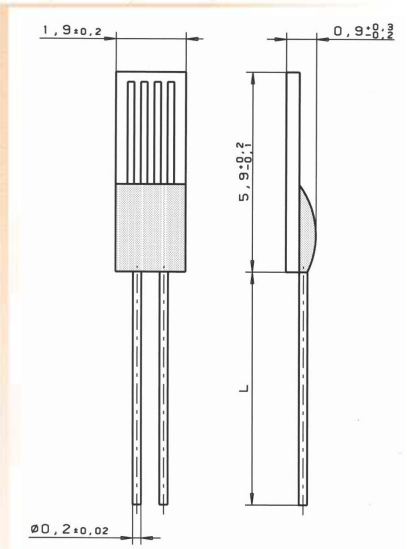
Platinum Resistance Temperature Detector M 620

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 values of 1000 Ω and 2000 Ω the signal gain is excellent. Typical applications are found in Automotive, White goods, HVAC, Medical and Industrial equipment.

Nominal Resistance R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Bag
1000 Ohm at 0℃	Class B	F 0.3	32 208 181
2000 Ohm at 0℃	Class B	F 0.3	32 208 541

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



Spezification DIN EN 60751 (according to IEC 751)

Temperature range -70℃ to +500℃ (continuous operation)
(temporary use to 550℃ possible)
Tolerance Class B: -70℃ to +500℃

Temperature coefficient TCR = 3850 ppm/K

Leads Pt clad Ni- wire
Recommend connection technology:
Welding, Crimping and Brazing

Lead lengths (L) 10mm ±1mm

Longterm stability max. R_0-drift 0.04% after 1000h at 500 ℃

Vibration resistance at least 40g acceleration at 10 to 2000 Hz, depends on installation

Shock resistance at least 100g acceleration with 8ms half sine wave , depends on installation

Environmental conditions unhoused for dry environments only

Insulation resistance > 100 MΩ at 20℃; > 2 MΩ at 500℃

Self heating 0.3 K/mW at 0℃

Response time

water current (v= 0.4m/s):	$t_{0.5}$ = 0.08s
	$t_{0.9}$ = 0.25s
air stream (v= 2m/s):	$t_{0.5}$ = 3.7s
	$t_{0.9}$ = 11.5s

Measuring current 1000Ω: 0.1 to 0,3mA
2000Ω: 0.1 to 0,3mA
(self heating has to be considered)

Note Other tolerances, values of resistance and wire lengths are available on request.

RoHS conform

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