

## Platinum Resistance Temperature Detector

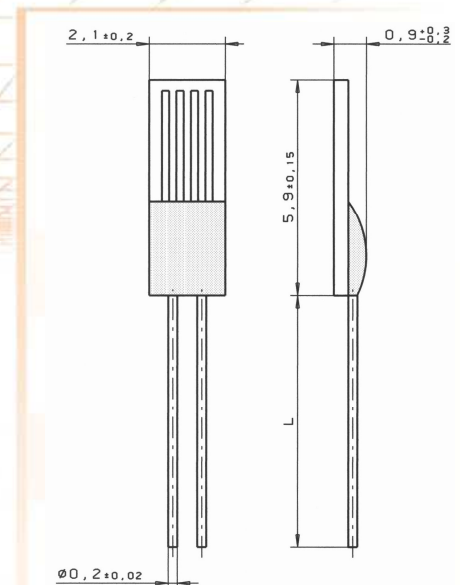
## M 622 10kOhm

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.

<b>Spezifikation</b>	DIN EN 60751 ( according to IEC 751)	
<b>Temperature range</b>	-70°C to +500°C (continuous operation) (temporary use to 550 °C possible) Tolerance class B: - 70 °C to + 500 °C	
<b>Temperature coefficient</b>	TCR = 3850 ppm/K	
<b>Leads</b>	Pt clad Ni wire Recommend connection technology: Welding, Crimping and Brazing	
<b>Longterm stability</b>	tbd	
<b>Lead lengths (L)</b>	10 mm +- 1 mm	
<b>Environmental conditions</b>	unhoused for dry environments only	
<b>Insulation resistance</b>	> 100 MΩ at 20 °C; > 2 MΩ at 500 °C	
<b>Vibration resistance</b>	at least 40 g acceleration at 10 to 2000 Hz, depends on installation	
<b>Shock resistance</b>	at least 100 g acceleration with 8ms half sine wave , depends on installation	
<b>Self heating</b>	0.3 K/mW at 0 °C	
<b>Response time</b>	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
<b>Measuring current</b>	10000 Ω:	0.1 to 0.25 mA (self heating has to be considered)
<b>Note</b>	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.

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