

Platinum Resistance Temperature Detector

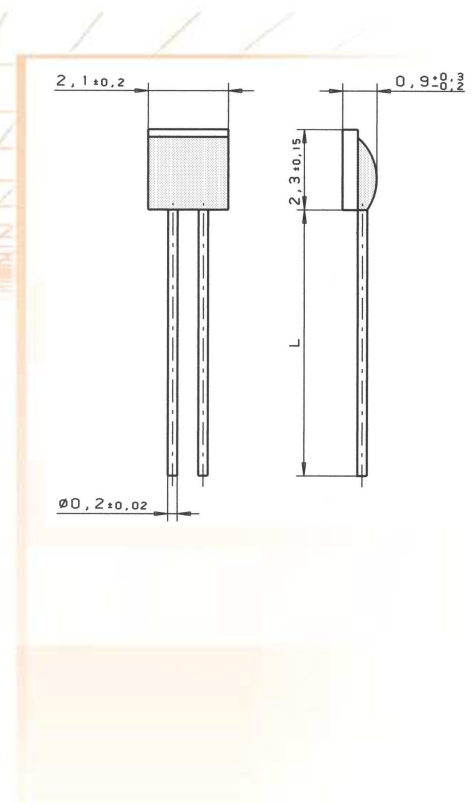
MN 222

MN- 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 R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Bag
100 Ohm at 0°C	Class A	F 0.15	32 207 759
	Class B	F 0.3	32 207 758
	Class 2B	F 0.6	32 207 757
500 Ohm at 0°C	Class B	F 0.3	32 207 756
	Class 2B	F 0.6	32 207 755
1000 Ohm at 0°C	Class A	F 0.15	32 207 754
	Class B	F 0.3	32 207 753
	Class 2B	F 0.6	32 207 751

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

Specification	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
	Tolerance Class A:	-50°C to +300°C
	Tolerance Class 2B:	-70°C to +500°C
Temperature coefficient	TCR = 3850 ppm/K	
Leads	Ni- wire Recommend connection technology: Welding and Brazing	
Lead lengths (L)	10mm ±1mm	
Ambient conditions	Unhoused for dry environments only	
Insulation resistance	> 100 MΩ at 20°C; > 2 MΩ at 500°C	
Self heating	0.4 K/mW at 0°C	
Response time	water current (v= 0.4m/s):	t _{0.5} = 0.05s t _{0.9} = 0.15s
	air stream (v= 2m/s):	t _{0.5} = 3.0s t _{0.9} = 10.0s
Measuring current	100Ω:0.3 to 1.0mA 500Ω:0.1 to 0.7mA 1000Ω:0.1 bis 0.3mA (self heating has to be considered)	
Application advice	<ol style="list-style-type: none"> To avoid shear forces on the connection area, the connection wires may be neither split or bent. The bending may only take place 3 mm after the element, using a bending or splitting tool. Other nominal values, lengths and temperature coefficients on request. Due to a production-caused oxide layer coating the leads, soft-soldering is restricted. 	
Note	Other tolerances, values of resistance 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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