

Platinum Resistance Temperature Detector

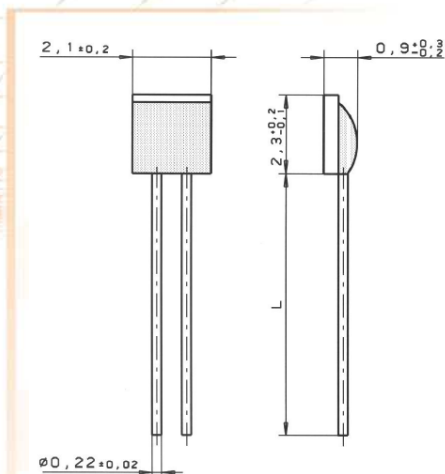
MN 222

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 A | F 0.15 | 32 207 761 |
| | 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.

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| Specification | DIN EN 60751 (according to IEC 751) |
| Temperature range | Tolerance Class A: -50°C to +300°C Tolerance Class B: -70°C to +500°C Tolerance Class 2B: -70°C to +500°C (temporary use at Cl. B and 2B to 550°C possible) |
| 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 | 1. 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. 2. Other nominal values, lengths and temperature coefficients on request. 3. 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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