

Platinum Resistance Temperature Detector

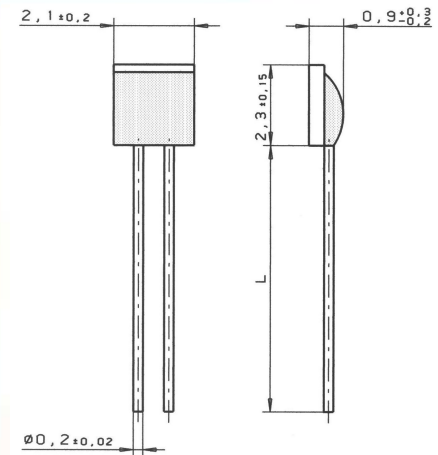
M 222

Mseries 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 Box |
|-----------------------|--------------------------------------|--------------------------------------|-----------------------------|
| 1000 Ohm at 0°C | Class B | F 0.3 | 32 208 233 |

The measuring point for the nominal resistance is defined at 6mm from the end of the sensor body.

| | |
|---------------------------------|--|
| Temperature range | -70°C to +500°C (continuous operation) (temporary use to 550 °C/ 750 hours possible) Tolerance Class B: -70°C up to 500°C |
| Temperature coefficient | TCR = 3750 ppm/K |
| Leads | Pt clad Ni- wire Recommend connection technology: Welding, Crimping and Brazing |
| Lead lengths (L) | 8mm ±1mm |
| Long-term stability | max. R ₀ -drift 0.04% after 1000h at 500°C |
| 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°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 | 500Ω: 0.1 to 0.7mA 1000Ω: 0.1 bis 0.3mA (self heating has to be considered) |



Note 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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