

Platinum Temperature Sensor in Thin-film Technology

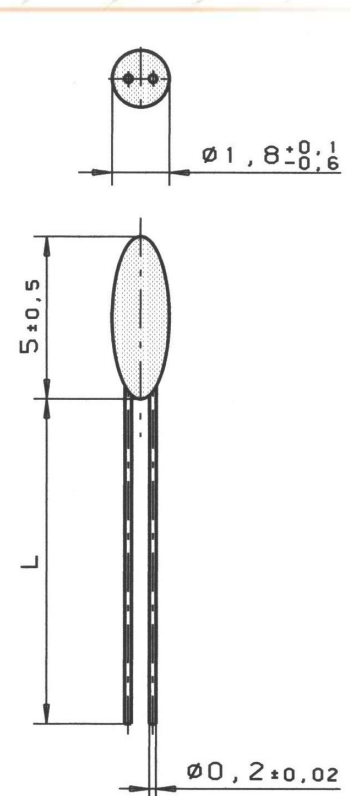
MR 518 G

MR 518 G platinum temperature sensors are characterized by their small, drop-form design. They are also characterized by high long-term stability, excellent precision over a wide temperature range and compatibility. They are used in the white goods, HVAC and energy generation industries as well as in medical and industrial appliances and machinery.

| Nominal Resistance R ₀ | Tolerance DIN EN 60751 1996-07 | Tolerance DIN EN 60751 2009-05 | Order Number Plastic Bag |
|-----------------------------------|--------------------------------------|--------------------------------------|-----------------------------|
| 100 Ohm at 0°C | Class B | F 0.3 | 32 209 504 |
| 100 Ohm at 0°C | Class A | F 0.15 | 32 209 505 |

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

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|--------------------------------|--|--|
| Specification | DIN EN 60751 | |
| Temperature range | -70°C to +500°C (continuous operation) Tolerance Class B: -70°C to +500°C Tolerance Class A: -50°C to +300°C | |
| Temperature coefficient | TCR = 3850 ppm/K | |
| Leads | Pt clad Ni wire | |
| Lead lengths (L) | 10mm +1mm / -2mm | |
| 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 | |
| Shock resistance | At least 100g acceleration with 8 ms half sine wave | |
| Ambient conditions | Use unprotected only in dry environments | |
| 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} = 0.2s t _{0.9} = 0.4s |
| | Air flow (v= 2m/s): | t _{0.5} = 3.0s t _{0.9} = 9.0s |
| Measuring current | 100Ω: 0.3 to 1.0mA | |



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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