

Platinum Resistance Temperature Detector

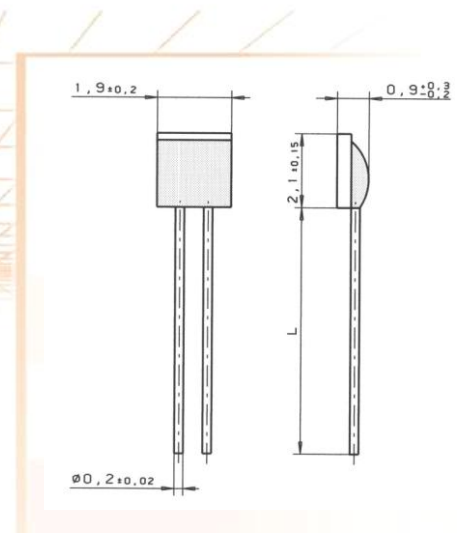
M 219

M-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, Appliances, HVAC, Energy Management, Life Science and the process industry.

Nominal Resistance R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Box
100 Ohm at 0°C	Class B	F 0.3	32 208 744
	Class 2B	F 0.6	32 208 729
1000 Ohm at 0°C	Class B	F 0.3	32 208 738

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

Specification	DIN EN 60751	
Temperature range	-70°C to +500°C (continuous operation) (temporary use to 550°C possible) Tolerance Class B und 2B: -70°C +500°C	
Tolerance class:	Class B and 2B	
Temperature coefficient	TC = 3850 ppm/K	
Leads	Pt clad Ni- wire Recommend connection technology: Welding, Crimping and Brazing	
Lead lengths (L)	10mm ±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, depending 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	0.5 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= 2.0m/s):	t _{0,5} = 3.0s t _{0,9} = 10.0s
Measuring current	100Ω: 0.3 to 1.0mA 1000Ω: 0.1 to 0.3mA (Self heating has to be considered)	



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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