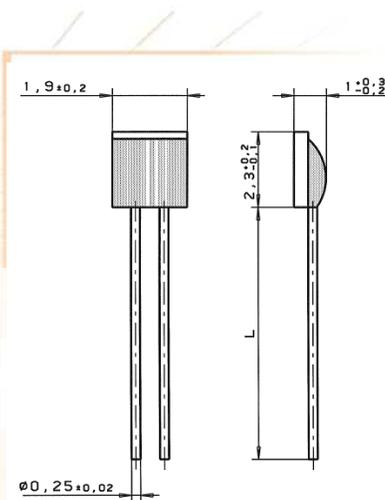## Platinum Resistance Temperature Detector   L 220

L 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 Box
100 Ohm at 0°C	Class 1/3 B	F 0,1	32 207 588
	Class A	F 0,15	32 207 584
	Class B	F 0,3	32 207 400
1000 Ohm at 0°C	Class B	F 0,3	32 207 733
	Class A	F 0,15	32 207 738

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	-50°C to +400°C (continuous operation)
	Tolerance Class B: -50°C to +400°C
	Tolerance Class A: -50°C to +300°C
	Tolerance Class 1/3 B: 0°C to +150°C
Temperature coefficient	TCR = 3850 ppm/K
Leads	AgPd- wire
Lead lengths (L)	10mm ±1mm
Long-term stability	max. R_0-drift 0.04% after 1000 h at 400°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 M Ω at 400°C
Self heating	0.4 K/mW at 0°C
Response time	water current (v= 0.4 m/s): $t_{0.5}$ = 0.06s
	$t_{0.9}$ = 0.20s
	air stream (v= 2 m/s): $t_{0.5}$ = 3.0s
	$t_{0.9}$ = 13.0s
Measuring current	100Ω: 0.3 to 1.0mA
	1000Ω: 0.1 to 0.3mA
	(self heating has to be considered)
Note	Other tolerances, values of resistance and wire lengths are available on request.

RoHS conform