

Platinum Resistance Temperature Detector

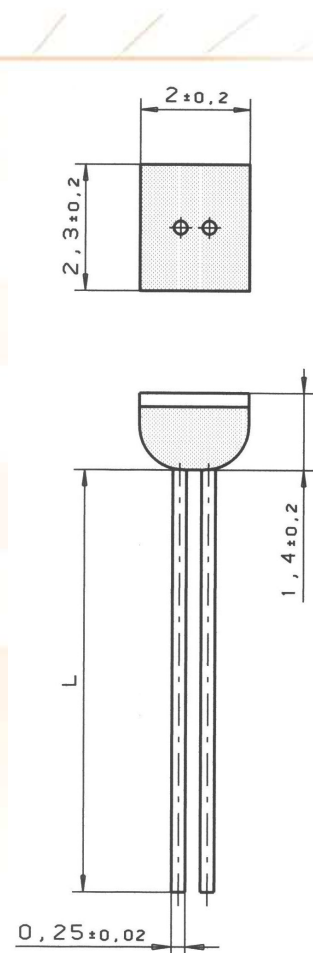
L 220 P

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 R_0	Tolerance	Order No.
100 Ohm at 0°C	DIN EN 60751, class B	32 207 302 (Plastic box) 32 207 608 (Vacuum packed)

The measuring point for the nominal resistance is defined at 8 mm 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	
Temperature coefficient	TCR = 3850 ppm/K	
Leads	AuPd	
Lead lengths (L)	10 mm +- 1 mm	
Long-term stability	max. R_0 -drift 0.04% after 1000 h at 400°C	
Vibration resistance	at least 40 g acceleration at 10 to 2000 Hz, depends on installation	
Shock resistance	at least 100 g acceleration with 8ms half sine wave, depends on installation	
Environmental conditions	unhoused for dry environments only	
Insulation resistance	> 100 M Ω at 20°C; > 2 M Ω at 500°C	
Self heating	0.4 K/mW at 0°C	
Response time	water current ($v = 0.4$ m/s):	$t_{0.5} = 0.20$ s $t_{0.9} = 0.30$ s
	air stream ($v = 2$ m/s):	$t_{0.5} = 3.0$ s $t_{0.9} = 9.0$ s
Measuring current	0.3 to 1.0 mA (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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