

## **Platinum Resistance Temperature Detector**

LN 222

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	<b>Tolerance</b> DIN EN 60751 1996-07	<b>Tolerance</b> DIN EN 60751 2009-05	Order Number Plastic Bag
100 Ohm at 0℃	Class A	F 0,15	32 207 771
	Class B	F 0,3	32 207 770
1000 Ohm at 0℃	Class A	F 0,15	32 207 773
	Class B	F 0,3	32 207 772

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)

-50℃ to +400℃ (continuous operation) Temperature range

Tolerance Class B: -50℃ to +400℃ Tolerance Class A: -50℃ to +300℃

Temperature coefficient TCR = 3850 ppm/K

Ni- silvercoated Leads

Recommend connection technology:

Soft soldering and Crimping

Lead lengths (L) 10mm ±1mm

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 M $\Omega$  at 20°C; > 2 M $\Omega$  at 400°C

Self heating 0.4 K/mW at 0℃

Response time water current (v= 0.4m/s):  $t_{0.5} = 0.05s$ 

> $t_{0.9} = 0.15s$  $t_{0.5} = 3.0s$

air stream (v= 2m/s):

 $t_{0.9} = 10.0s$ 

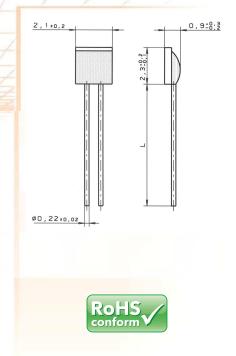
**Measuring current** 100 $\Omega$ : 0.3 to 1.0mA

1000 $\Omega$ : 0.1 to 0.3mA

(self heating has to be considered)

Other tolerances, values of resistance and wire Note

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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