

LS219, Pt Temperature Sensor according to DIN EN IEC 60751

Temperature range -50 °C to +150 °C

- Designed for low temperature applications
- Optimized for soldering connection
- High accuracy and interchangeability
- Excellent long term stability and low drift

LS series Pt-RTDs are designed for high volume low temperature applications where long term stability, interchangeability and accuracy are vital. Typical applications include HVAC, Food and Beverage, Medical and Industrial equipment.

Nominal Resistance R_0 [Ω]	Tolerance Class	Order Number	Packaging
Pt100	F 0.3 (B)	5205115	VCI-Plastic bag
Pt1000	F 0.3 (B)	5203377	VCI-Plastic bag

The measuring point for the nominal resistance is 2 mm from the end of the sensor body.

Temperature Range of Tolerance Class

Validity of Class F 0.3 (B) -50 °C to +150 °C
The specified tolerance classes refer to continuous operation.
Short term temperature exposure for soldering: Max. 5 minutes up to 250 °C.

Temperature Coefficient

TCR = 3850 ppm/K

Response Time

Air ($v = 3 \text{ m/s}$):
 $t_{0.5} = 1.5 \text{ s}$
 $t_{0.9} = 5 \text{ s}$

Measuring Current

Pt100 Ω: 0.3 to 1 mA
Pt1000 Ω: 0.1 to 0.3 mA
(self-heating has to be considered)

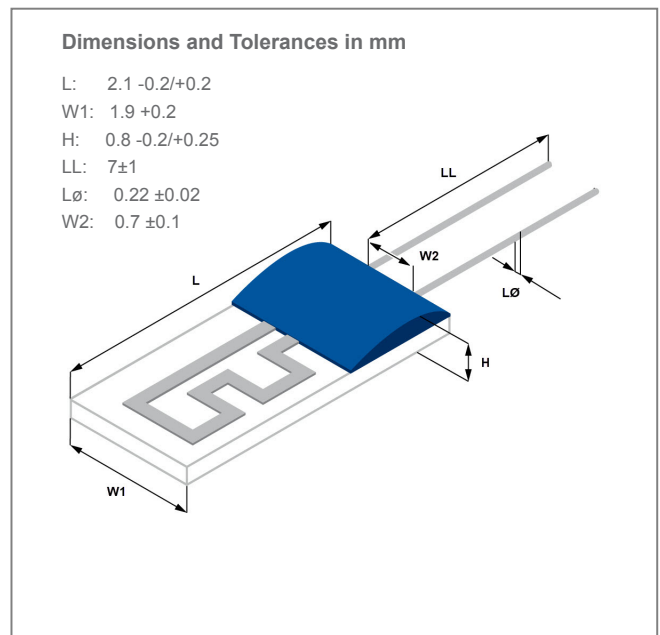


Image for illustration purposes only
Color, shape and forming of fixing drop may vary
W2 only valid at outlet spot of wire

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Long-Term Stability

The drift of the resistance value at 0 °C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according to DIN EN IEC 60751.

Typical drift of R(0 °C) is <0.04 % after 1000 hours at +150 °C.

Self-Heating

0.03 K/mW (Pt1000; Water v= 0,4m/s)

Insulation Resistance

> 100 MΩ at +20 °C

Connection Technology

Crimping, Soft Soldering

Lead Type

Ni-silvercoated

Tensile Strength of Leads

≥ 10 N

Packaging

VCI-Plastic bag

Alternative packaging forms on request.

Storage Life

At least 12 months (after manufacture), when stored under the recommended conditions. Longer shelf life may be possible, depending upon actual storage conditions, after requalification by customer. Nitrogen atmosphere recommended.

Note

Other tolerances, values of resistance and wire lengths are available on request.

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor.

California Proposition 65



WARNING

WARNING: This product can expose you to chemicals including nickel and cobalt, which are known to the State of California to cause cancer.

For more information go to www.p65warnings.ca.gov



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Page 2 of 2