Housed Platinum Resistance Temperature Detector

TO 92

The PRTD in a plastic housing is characterized by its standardized signal according to DIN EN 60751 (according to IEC 751), interchangeability, excellent long time stability and accuracy. It offers an optimal price-performance ratio in large volume applications including Automotive, Domestic Appliances and Industrial Equipment.

Nominal resistance R ₀	Tolerance	Order No. Plastic bag
100 Ohm at 0℃	DIN EN 60751, class B DIN EN 60751, class 2B	32 209 210 32 209 216
1000 Ohm at 0℃	DIN EN 60751, class B DIN EN 60751, class 2B	32 209 220 32 209 226

Specification DIN EN 60751 (according to IEC 751)

Temperature range - 50 ℃ to + 150 ℃

Temperature coefficient TCR = 3850 ppm/K

Soldering connection Cu alloy with Sn coating

Long-term stability max. R₀-drift 0.06% after 1000 h at 150 ℃

max. R₀-drift 0.04% after 1000 h at -55 ℃

Self heating Pt100: 0.4 K/mW

Pt1000: 0.2 K/mW

Response time water current (v = 0.4 m/s): $t_{0.5} = 0.7 \text{s}$

 $t_{0.9} = 2.0 \text{ s}$

air stream (v = 2 m/s): $t_{0.5} = 8.0s$

 $t_{0.9} = 26s$

Resistance to soldering heat max. deviation 0.03 % after 10s at 260 $^{\circ}$ C

Flammability UL 94-V0

Specific volume 20 °C: $5 \times 10^{16} \Omega$ cm resistance 150 °C: $5 \times 10^{13} \Omega$ cm

Physical data material: duroplastic

of housing coefficient of thermal expansion: 13 \times 10⁻⁶/°C

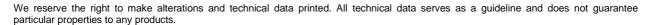
thermal conductivity: 0.65 W/mK

moisture absorption: 0.5% (P.C.T.: 121 °C, 24 h)

Storing information ≤ 1 year (in dry environments) for best solderability

Note Other tolerances and values of resistance are

available on request.



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