

Platinum Resistance Temperature Detector

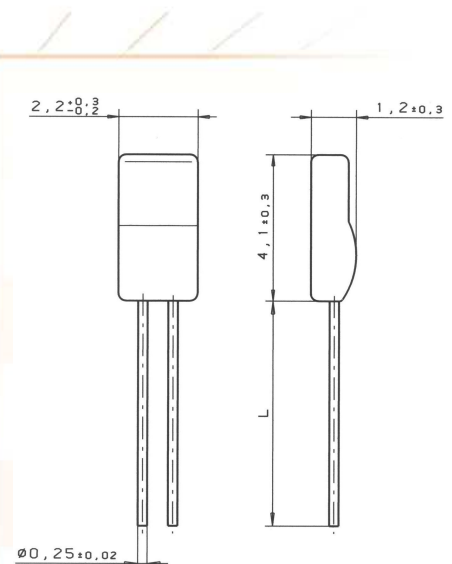
HD 421

HD 421 Pt 100-type platinum temperature sensors are characterized by long-term stability, precision over a broad temperature range and compatibility. Main application area is the process technology.

Nominal Resistance R_0	Tolerance Up to 650°C	Tolerance Up to 850°C	Order No. Blister box
100 Ohm at 0°C	DIN EN 60751, class B	DIN EN 60751, class 2B	32 208 228

The measuring point for the nominal resistance is defined at 4 mm from the end of the sensor body.

Specification	DIN EN 60751	
Temperature range	- 70°C up to + 850°C	
Temperature coefficient	TCR= 3850 ppm/K	
Leads	Pt	
Lead length (L)	6 mm +- 1mm	
Long-term tests	1000 h at 850°C (energized, open) smaller then the allowed deviation according to DIN B. 1000 h at 650°C (under current as clean MI-type) smaller then the allowed deviation according to DIN B.	
Vibration resistance	at least 40g acceleration with 8ms half sine wave signal, depends on the installation	
Shock resistance	at least 100g acceleration at frequencies from 10Hz up to 2000Hz, depends on the installation	
Environmental conditions	Unhoused for dry environment only, Up to 650°C in housings also as clean MI-type possible, above 650°C no reducing atmosphere, free air admission necessary	
Insulation resistance	>100 MOhm at 20°C; >2 MOhm at 650°C	
Self heating	0.2 K/mW	
Response time	Water current (v = 0.4 m/s):	$t_{0,5} = 0.05$ s $t_{0,9} = 0.17$ s
	Air stream (v = 2 m/s):	$t_{0,5} = 3.3$ s $t_{0,9} = 13.0$ s
Measuring current	up to 5 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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