

## Platinum Resistance Temperature Detector

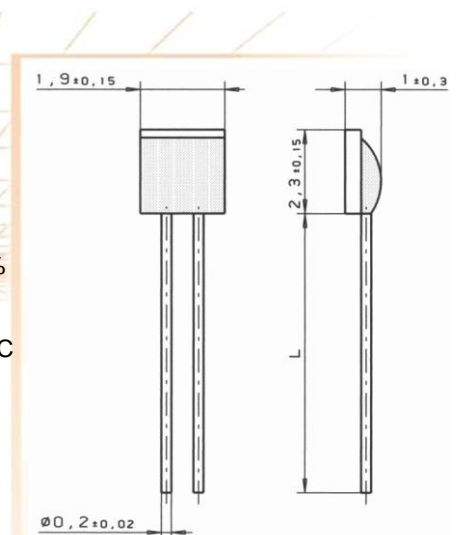
## HM 220

HM 220 type platinum sensors are characterised by long-term stability, precision over a broad temperature range and compatibility. The main feature is the small design. They are used in particular for applications with high consumption volumes, e.g. white goods and heating power.

Nominal Resistance R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic bag
100 Ohm at 0°C	Class B	F 0.3	32 208 787
	Class A	F 0.15	32 208 788

The measuring point for the nominal resistance is defined at 6mm from the end of the sensor body.

<b>Specification</b>	DIN EN 60751	
<b>Temperature range</b>	-70°C up to +600°C Tolerance Class B: -70°C up to 600°C Tolerance Class A: -50°C up to 300°C	
<b>Temperature coefficient</b>	TC = 3850 ppm/K	
<b>Leads</b>	Pd alloy with Pt coating wire	
<b>Lead lengths (L)</b>	8mm ±1mm	
<b>Long-term tests</b>	R <sub>0</sub> - Drift after 1000h at 600°C (energized) < 0,24% (Unhoused chip in standard atmosphere.)	
<b>Environmental conditions</b>	Unhoused for dry environmental only, above 500°C no reducing atmosphere, free air admission is necessary. Assembly can influence the long term stability!	
<b>Vibration resistance</b>	at least 40g acceleration at 10 to 2000 Hz, depends on installation	
<b>Shock resistance</b>	at least 100g acceleration with 8ms half sine wave, depends on installation	
<b>Insulation resistance</b>	> 100 MΩ at 20°C; > 1 MΩ at 600°C	
<b>Self heating</b>	0.2 K/mW	
<b>Response time</b>	Water current (v= 0.4m/s):	t <sub>0,5</sub> = 0.05s t <sub>0,9</sub> = 0.14s
	Air stream (v=2 m/s):	t <sub>0,5</sub> = 3.0s t <sub>0,9</sub> = 10s
<b>Measuring current</b>	0.1 to 1mA (self heating has to be considered)	
<b>Note</b>	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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