

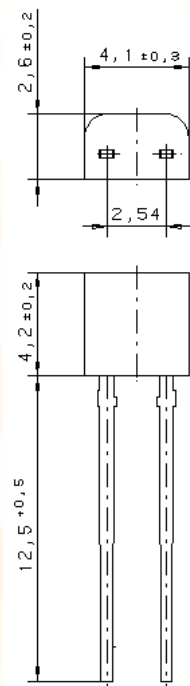
## Housed Platinum Resistance Temperature Detector

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°C	DIN EN 60751, class B DIN EN 60751, class 2B	32 209 210 32 209 216
1000 Ohm at 0°C	DIN EN 60751, class B DIN EN 60751, class 2B	32 209 220 32 209 226

<b>Specification</b>	DIN EN 60751 (according to IEC 751)	
<b>Temperature range</b>	- 50 °C to + 150 °C	
<b>Temperature coefficient</b>	TCR = 3850 ppm/K	
<b>Soldering connection</b>	Cu alloy with Sn coating	
<b>Long-term stability</b>	max. $R_0$ -drift 0.06% after 1000 h at 150 °C max. $R_0$ -drift 0.04% after 1000 h at -55 °C	
<b>Self heating</b>	Pt100: 0.4 K/mW Pt1000: 0.2 K/mW	
<b>Response time</b>	water current ( $v = 0.4$ m/s):	$t_{0.5} = 0.7$ s $t_{0.9} = 2.0$ s
	air stream ( $v = 2$ m/s):	$t_{0.5} = 8.0$ s $t_{0.9} = 26$ s
<b>Resistance to soldering heat</b>	max. deviation 0.03 % after 10s at 260 °C	
<b>Flammability</b>	UL 94-V0	
<b>Specific volume resistance</b>	20 °C: $5 \times 10^{16}$ Ω cm	150 °C: $5 \times 10^{13}$ Ω cm
<b>Physical data of housing</b>	material: duroplastic 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)	
<b>Storing information</b>	≤ 1 year (in dry environments) for best solderability	
<b>Note</b>	Other tolerances and values of resistance 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.

Heraeus Sensor Technology GmbH, Reinhard- Heraeus- Ring 23, 63801 Kleinostheim, Germany  
Phone: +49 (0) 6181/35-8098, Fax: +49 (0)6181/35-8101, E-Mail: [info.HSND@Heraeus.com](mailto:info.HSND@Heraeus.com) Web: [www.heraeus-sensor-technology.com](http://www.heraeus-sensor-technology.com)