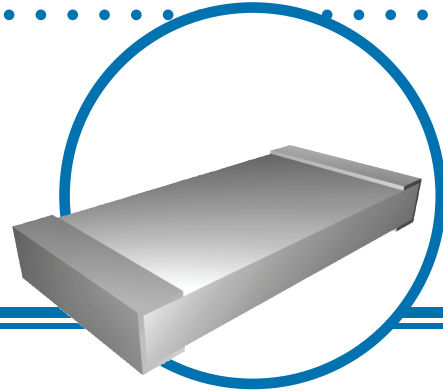


# Platinum Temperature Sensor

## RTD Series

- High stability Platinum based sensor
- High resolution, accuracy and interchangeability
- Compatible with automatic placement equipment
- Wide temperature range - Very fast response time
- Surface mount package available with SnPb and Pb-free terminations



## Electrical Data

	P1206	P0805	P0603
<b>Self Heating</b>	0.13°C/mW	0.13°C/mW	0.14°C/mW
<b>Available Resistances</b>	100Ω, 1.0KΩ	100Ω	100Ω
<b>Resistance Tolerances</b>	±0.5%, ±1%, ±2%, ±5%		
<b>Operating Temperature Range</b>	-55°C to +150°C		
<b>Temperature Coefficient</b>	+3850 ppm/°C		
<b>Insulation Resistance</b>	10MΩ minimum at 25°C		
<b>Recommended Measuring Current</b>	≤1mA		
<b>Long term Stability (10,000 hours at 125°C)</b>	<0.05%		
<b>Termination</b>	60/40 SnPb or 100% Sn		

The temperature sensor is a conventional thin film platinum RTD in a surface mount package designed for temperature sensing, over-temperature protection and temperature compensation in any application where printed circuit board temperature sensing is desired.

\* Temperature coefficient in accordance with IEC751

## Performance Data

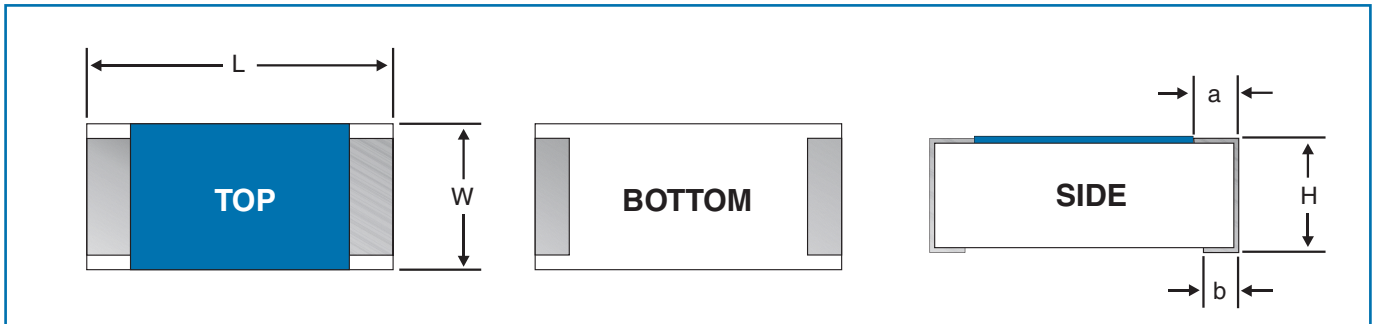
Settling Response Time						
	P1206		P0805		P0603	
<b>Rapidly Stirred Oil</b>	0.2s (t <sub>0.5</sub> )	0.6s (t <sub>0.9</sub> )	0.1s (t <sub>0.5</sub> )	0.4s (t <sub>0.9</sub> )	0.1s (t <sub>0.5</sub> )	0.4s (t <sub>0.9</sub> )
<b>Air @ 1m/s</b>	1.8s (t <sub>0.5</sub> )	6s (t <sub>0.9</sub> )	1.2s (t <sub>0.5</sub> )	4.2s (t <sub>0.9</sub> )	1.1s (t <sub>0.5</sub> )	3.7s (t <sub>0.9</sub> )

### General Note

IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

# Platinum Temperature Sensor

## Physical Data



	L	W	H	a	b
<b>P0603</b>	0.063"±0.004"	0.031"±0.004"	0.020"±0.004"	0.008"±0.004"	0.008"±0.004"
<b>P0805</b>	0.081"±0.005"	0.050"±0.005"	0.020"±0.006"	0.016"±0.008"	0.016"±0.008"
<b>P1206</b>	0.126"±0.006"	0.063"±0.005"	0.024"±0.004"	0.016"±0.008"	0.016"±0.008"

## Ordering Data

RTD - P1206 - 43 - 1001 - D

**Model** .....

P1206 = 1206 chip with standard SnPb terminations  
P1206LF = 1206 chip with Pb-Free terminations  
P0805 = 0805 chip with standard SnPb terminations  
P0805LF = 0805 chip with Pb-Free terminations  
P0603 = 0603 chip with standard SnPb terminations  
P0603LF = 0603 chip with Pb-Free terminations

**Temperature Coefficient** .....

42 = +3850 ppm/°C ±100 ppm/°C  
43 = +3850 ppm/°C ± 50 ppm/°C

**Resistance Code** .....

Standard 4 Digit Resistance Code  
Ex: 1000 = 100Ω; 1001 = 1000Ω

**Tolerance Code** .....

D= ±0.5%  
F= ±1.0%  
G=±2.0%  
J=±5.0%

For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.