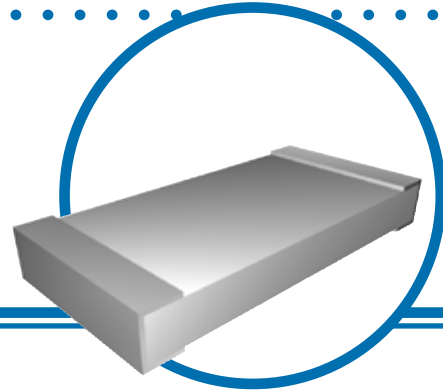


# Platinum Temperature Sensor

## 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

|  | P0603                 | P0805     | P1206       |
|--|-----------------------|-----------|-------------|
| <b>Self Heating</b>                                | 0.14°C/mW             | 0.13°C/mW | 0.13°C/mW   |
| <b>Available Resistances</b>                       | 100Ω                  | 100Ω      | 100Ω, 1.0KΩ |
| <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     |                       |                       |                       |                       |                       |                       |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                            | P0603                 |                       | P0805                 |                       | P1206                 |                       |
| <b>Rapidly Stirred Oil</b> | 0.1s<br>( $t_{0.5}$ ) | 0.4s<br>( $t_{0.9}$ ) | 0.1s<br>( $t_{0.5}$ ) | 0.4s<br>( $t_{0.9}$ ) | 0.2s<br>( $t_{0.5}$ ) | 0.6s<br>( $t_{0.9}$ ) |
| <b>Air @ 1m/s</b>          | 1.1s<br>( $t_{0.5}$ ) | 3.7s<br>( $t_{0.9}$ ) | 1.2s<br>( $t_{0.5}$ ) | 4.2s<br>( $t_{0.9}$ ) | 1.8s<br>( $t_{0.5}$ ) | 6s<br>( $t_{0.9}$ )   |

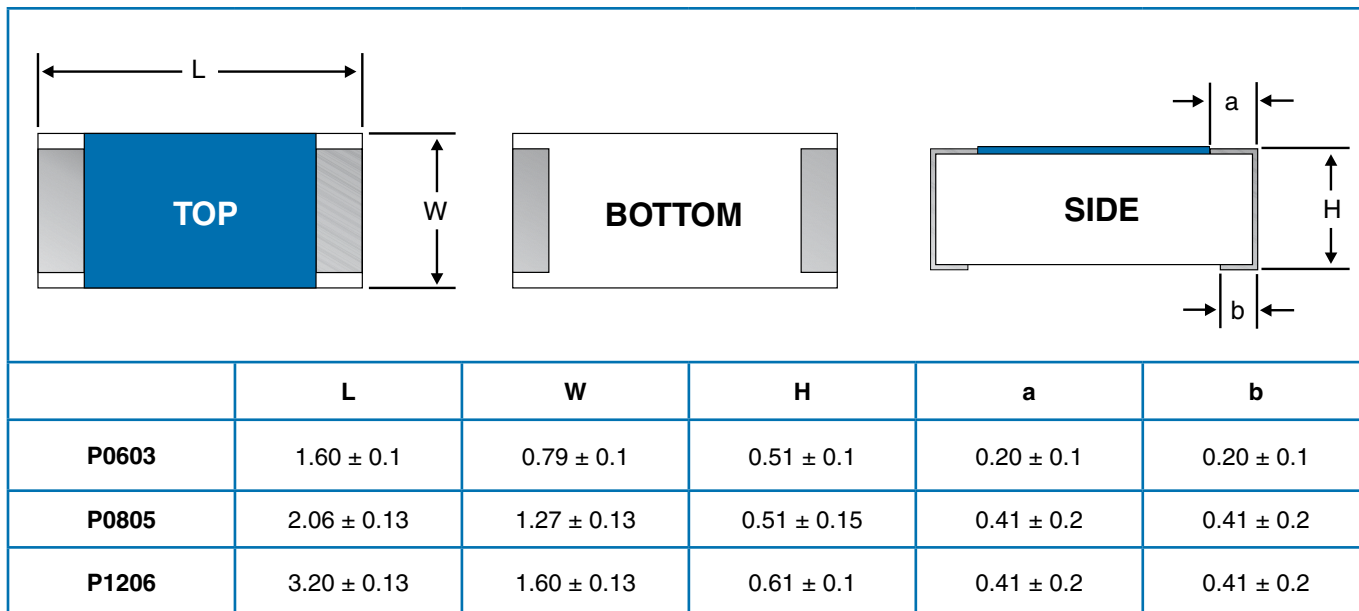
### General Note

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

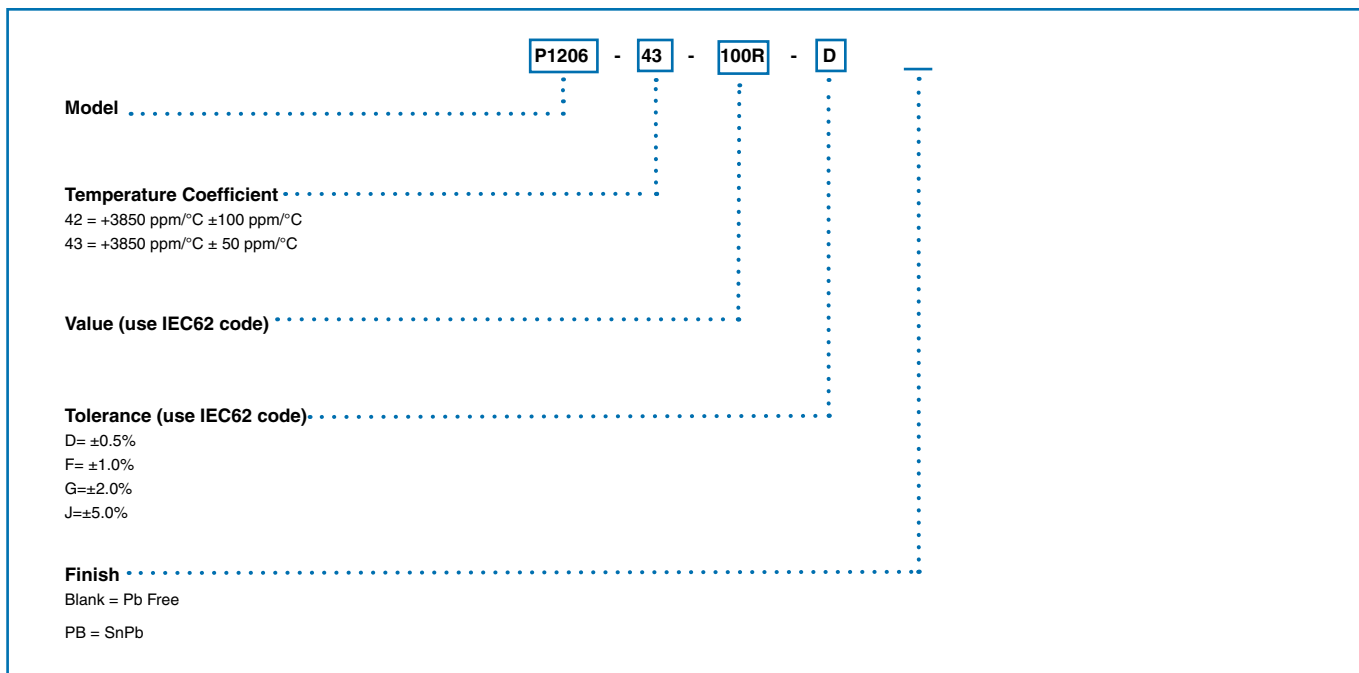
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# Platinum Temperature Sensor

## Physical Data



## Ordering Data



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