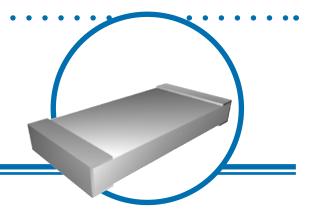
# Platinum Temperature Sensor



#### **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**

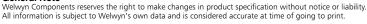
| Solf Hosting                                | P0603                 | P0805 | P1206       |  |  |  |  |
|---|-----------------------|-------|-------------|--|--|--|--|
| Self Heating                                | 0.14°C/mW             |       | 0.13°C/mW   |  |  |  |  |
| Available Resistances                       | 100Ω                  | 100Ω  | 100Ω, 1.0ΚΩ |  |  |  |  |
| Resistance Tolerances                       | ±0.5%, ±1%, ±2%, ±5%  |       |             |  |  |  |  |
| Operating Temperature<br>Range              | -55°C to +150°C       |       |             |  |  |  |  |
| Temperature Coefficient                     | +3850 ppm/°C          |       |             |  |  |  |  |
| Insulation Resistance                       | 10MΩ minimum at 25°C  |       |             |  |  |  |  |
| Recommended Measuring<br>Current            | ≤1mA                  |       |             |  |  |  |  |
| Long Term Stability (10,000 hours at 125°C) | <0.05%                |       |             |  |  |  |  |
| Termination                                 | 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.

### Performance Data

| Settling Response Time |                     |                     |                     |                     |                     |                     |  |  |
|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|
|                        | P0603               |                     | P0805               |                     | P1206               |                     |  |  |
| Rapidly Stirred Oil    | 0.1s                | 0.4s                | 0.1s                | 0.4s                | 0.2s                | 0.6s                |  |  |
|                        | (t <sub>0.5</sub> ) | (t <sub>0.9</sub> ) | (t <sub>0.5</sub> ) | (t <sub>0.9</sub> ) | (t <sub>0.5</sub> ) | (t <sub>o.9</sub> ) |  |  |
| Air @ 1m/s             | 1.1s                | 3.7s                | 1.2s                | 4.2s                | 1.8s                | 6s                  |  |  |
|                        | (t <sub>0.5</sub> ) | (t <sub>o.9</sub> ) | (t <sub>0.5</sub> ) | (t <sub>0.9</sub> ) | (t <sub>0.5</sub> ) | (t <sub>0.9</sub> ) |  |  |





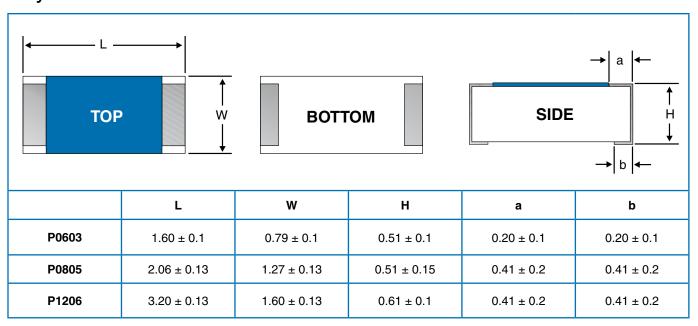


 $<sup>\</sup>mbox{\ensuremath{^{\star}}}$  Temperature coefficient in accordance with IEC751

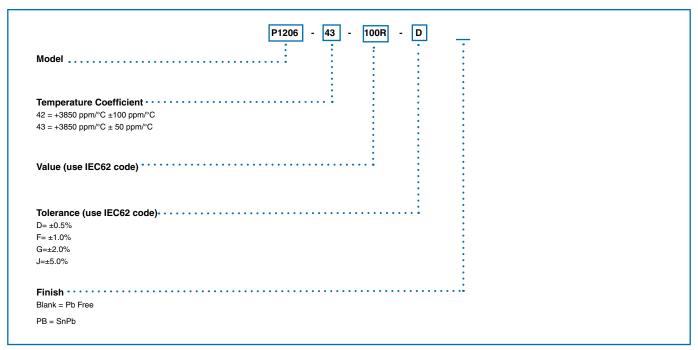
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## Physical Data



### Ordering Data



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