# **SMD LINEAR THERMISTORS**



#### **Features**

- Linearity between temperature and resistance
- High accuracy up to 0.12%
- High reliability in application field

### **Applications**

- Temperature measurement
- Temperature compensation
- Over-temperature protection

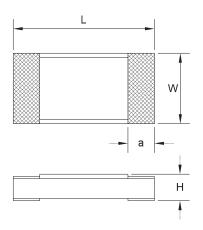
#### **Specifications**

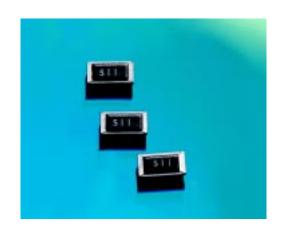
| Туре                            | SE10235       | SE10255       |
|---------------------------------|---------------|---------------|
| Physical Dimension:             | 3.2-          | 1.6±0.2       |
| (mm)                            | 0.4±0.2       | 0.4±0.2       |
| Nominal Resistance at 0°C       | 1000 Ω        | 1000 Ω        |
| Tolerance                       | ±0.12%        | ±0.48%        |
| Temperature coefficient (TCR)   | 3750 (ppm/°C) | 3750 (ppm/°C) |
| Maximum Applied Current         | 1mA           | 3mA           |
| Response Time (90% Air, 1m/sec) | 6 sec.        | 6 sec.        |
| Self-Heating (Air, 1m/sec)      | 3.5mW/ °C     | 10.5mW/ °C    |
| Power Rating at 70°C            | 0.05W         | 0.05W         |
| Operating Temperature           | -40°C~        | 155°C         |

<sup>\*</sup> For more precision or different special design resistance, please contact Cyntec for more details.

## C. SE Series

SE Series (SMD Pt Sensor) is designed especially to meet the board level application for temperature measurement & compensation and over-temperature protection. With its surface mount package, SE Series can be handled by automatic pick & place machine. In addition, characteristics of Pt-RTD such as long term stability and interchangeability remain the same. Please contact us for more information about our surface mount Pt-RTD.





|   |   | SE10235          | SE10255    |
|---|---|------------------|------------|
| Dimensions<br>(Unit: mm)                                  | L | 3.2 $\pm$ 0.2 mm |            |
|   | W | 1.6±0.2 mm       |            |
|   | а | 0.4±0.2 mm       |            |
|   | Н | 0.4±0.2 mm       |            |
| Nominal R at 0°C  |   | 1000             |            |
| TCR   |   | 3750             |            |
| Operating Temp.   |   | -40℃~155℃        |            |
| Tolerance at 0°C  |   | ±0.12%           | ±0.48%     |
| Response Time (90%) in Air<br>of 1 m/sec                  |   | 6 sec. Max.      |            |
| Maximum Applied Current                                   |   | 1mA              | 3mA        |
| Dissipation Constant (Self-<br>Heating) in Air of 1 m/sec |   | 3.5 mW/℃         | 10.5 mW/°C |

#### How to order

<u>SE</u> 102 5 <u>5</u> Series Ice Point Resistance TCR/Tolerance

Package SE  $102:1000\Omega$ 3:3750/B 5: Surface Mount 5:3750/D