THIN FILM PLATINUM TEMPERATURE SENSOR

-70 to +500°C
- 100 or 1000 ohm DIN RTD
- Class A, B or 1/3DIN
- economy bulk pack

The PC1.2004 sensors feature long term stability and precision over a wide temperature range. They are used in industrial, food processing and medical applications and because of their economy they are often used in applications requiring large quantities of sensors such as HVAC, automotive and energy generation.

TECHNICAL DATA
Temperature coefficient
TCR = 3850 ppm/°C

Temperature range
class B -70°C to +500°C
class A -30°C to +350°C
class 1/3B 0°C to +100°C

Leads Nickel platinum-clad wire

Specification DIN EN 60751

Size
3.9mm x 2.1mm x 0.8mm LxWxH, Leads 10mm

Long-term stability
$R_0$ drift less than or equal to 0.04 % after 1000 h at 500°C

Vibration resistance
at least 40g acceleration at 10 to 2000 Hz, depending on mounting method

Insulation resistance >10 MΩ at 20°C; >1 MΩ at 500°C

Shock resistance
at least 100g acceleration with 8ms half sine wave, depending on mounting method

Self-heat coefficient in air 0.3°C / mW at 0°C

Response times in seconds
water @0.4 m/s $t_{50}$% 0.2s $t_{90}$% 0.3s
air @ 1 m/s $t_{50}$% 3.4s $t_{90}$% 11s

Ambient conditions
Use unprotected only in dry environments

Packaging Bulk pack of 500 pieces

Measured current
100 Ω 0.1 to max. 0.3 mA
1000 Ω 0.1 to max. 0.3 mA

ORDERING DATA
PC1.2004.1 100 ohm class B bulk pack
PC1.2004.1-A 100 ohm class A bulk pack
PC1.2004.1-1/3 100 ohm class 1/3 bulk pack
PC1.2004.10 1000 ohm class B bulk pack
PC1.2004.10-A 1000 ohm class A bulk pack
PC1.2004.10-1/3 1000 ohm class 1/3 bulk pack