



CPTC Thermistor

PRODUCT DATA

■ Overload Protection

● Features

1. PPD type are naked
2. PPL Type are leaded
3. Low, medium and high voltage ratings
4. Low resistance
5. Small size
6. No need to reset supply after overload
7. No noise generated
8. Stable over a long time



● Recommended Applications

1. Telecommunications (Program-controller)
2. Electrical equipment (Electrical machinery, Transformer)

● Approvals



- * UL 1434 Recognized (File#E138827)
- * cUL Recognized (File#E138827)



- * TUV Certificate No.R50025585

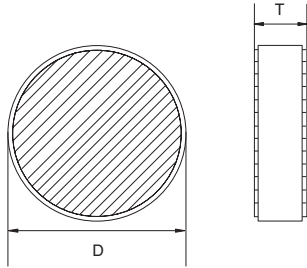


- * CQC Certificate No.CQC03001008123 & CQC03001008124



● **Dimensions**

PPD Series



(Unit: mm)

● **Characteristics**

PPD Series

| Part No. | Curie Temperature | Nominal Zero-power Resistance | Trip Current at 25°C | Non-operating Current at 40°C | Voltage | Maximum Current | Dimensions | |
|---------------|---------------------|-------------------------------|----------------------|-------------------------------|---------|-----------------|--------------------|----------------------|
| | T _c (°C) | R ₂₅ (Ω) | I _t (mA) | I _N (mA) | | | V _R (V) | I _{max} (A) |
| PPD08120□P6B2 | 60 ±0 | 12 | 200 | 80 | 220 | 2 | 8±0.5 | 1.5~2.2 |
| PPD08150□P6B2 | | 15 | 190 | 80 | 220 | 2 | 8±0.5 | 1.5~2.2 |
| PPD08180□P6B2 | | 18 | 180 | 80 | 220 | 2 | 8±0.5 | 1.5~2.2 |
| PPD08100□P9B2 | 90 ±0 | 10 | 250 | 110 | 220 | 2 | 8±0.5 | 1.5~2.2 |
| PPD08120□P9B2 | | 12 | 250 | 110 | 220 | 2 | 8±0.5 | 1.5~2.2 |
| PPD08150□P9B2 | | 15 | 240 | 110 | 220 | 2 | 8±0.5 | 1.5~2.2 |
| PPD08180□P9B2 | | 18 | 240 | 110 | 220 | 2 | 8±0.5 | 1.5~2.2 |
| PPD06180□A0B2 | 100 ±0 | 18 | 200 | 110 | 220 | 2 | 6.5±0.5 | 1.5~2.2 |
| PPD05180□A1B2 | 110 ±0 | 18 | 200 | 110 | 220 | 2 | 5.5±0.5 | 1.5~2.2 |

Note: □=Tolerance of R₂₅



● Reliability Test

| Item | Test Condition / Methods | Standard |
|--|--|---|
| Resistance to Soldering Heat * | Temperature: 350 ± °C Duration: 3~4 s | IEC60068-2-20 Test T _b |
| Robustness of Termination * | Tensile, bending and torsion tests as appropriate to type termination | IEC60068-2-21 |
| Rapid Change of Temperature | T _A =LCT T _B =UCT Number of cycles:5 Duration: 30 min | IEC60068-2-14 Test N _a |
| Vibration * | Frequency :10-55 Hz h= 0.75 min Duration: 6 h | IEC 60068-2-6 Test Fc |
| Shock * | Pulse shape: half-sine Acceleration: 50m/s ² Pulse duration: 30 ms | IEC 60068-2-27 Test E _a |
| Climatic Sequence * | Dry heat :T= 40°C, 24hrs , 20%Rh Damp heat first cycle: T=40°C 95% R h Cold: T=0°C, 2hrs Damp heat 5 cycles | IEC 60068-2-2 Test Ba IEC 60068-2-30 Test D _b IEC 60068-2-1 Test Aa |
| Thermal Time Constant by Cooling | 63.2% of temperature excess | IEC 60738-1 |
| Temperature Coefficient of Resistance | $\alpha_T = \ln(R_{Tc+25}/R_{Tc+10}) / 15$ R _{Tc} =2R _{min} | IEC 60738-1 |
| Dissipation Factor at V _{max} | Voltage: V _{max} Current: <I _{max} | IEC 60738-1 |
| Endurance at Upper Category Temperature | Temperature: UCT Duration: 1000 hrs | IEC 60738-1 |
| Endurance at Maximum Operating Temperature and Maximum Voltage | Voltage: V _{max} Temperature: UCT Current: <I _{max} Duration: 1000 hrs | IEC 60738-1 |
| Endurance at Room Temperature (Cycling) | Voltage: V _{max} Temperature: 25 ±5°C Current: ≤I _{max} Number of cycle 1,000、10,000 or 100,000 | IEC 60738-1 |
| Damp Heat Steady State | Temperature: 40 ±5°C Relative humidity of air: 95~98%Rh Duration: 1000 hrs | IEC 60068-2-3 Test C _a |

* : Only application for PPL series