



CPTC Thermistor

PRODUCT DATA

■ Heating

● Features

1. Self-regulating heating element
2. Constant temperature
3. Circuit simple
4. Suitable for clamp-contacting
5. Stable over a long life

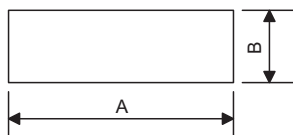
● Recommended Applications

1. Home appliances (Air conditioner)
2. Automobile



● Dimensions

PHR Series



(Unit: mm)



● Characteristics

PHR Series

Part No.	Curie Temperature	Surface Temperature	Nominal Zero-power Resistance	Rated Voltage	Maximum Voltage	Dimensions		
	T _c (°C)	T _s (°C)	R ₂₅ (Ω)	V _R (V)	V _{max} (V)	A±1 (mm)	B±0.1 (mm)	C±0.2 (mm)
PHRA1301□P7A4	70	85	300	100/120	140	16	11	2.5
PHRA1181□P7A4	70	90	180	100/120	140	16	11	2.5
PHRA1701□P8B7	80	100	700	220/240	270	16	11	2.5
PHRA2501□P9B7	90	110	500	220/240	270	23.5	10	2.2
PHRA3801□B1B7	210	230	800	220/240	270	19	12	2.2
PHRA2301□B3A4	230	250	300	100/120	140	23.5	10	2.2
PHRA2701□B4B7	240	255	700	220/240	270	23.5	10	2.2
PHRA4501□B4B7	240	255	500	220/240	270	36	6	2.3

Note: □=Tolerance of R₂₅

● Reliability Test

Item	Test Condition / Methods	Standard
Rapid Change of Temperature	T _A =LCT T _B =UCT Number of cycles:5 Duration: 30 min	IEC60068-2-14 Test N _a
Temperature Coefficient of Resistance	$\alpha_T = \ln(R_{Tc+25}/R_{Tc+10}) / 15$ R _{Tc} =2R _{min}	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 Duration: 1000 hrs	IEC 60738-1
Endurance at Room Temperature (Cycling)	Voltage: V _{max} Temperature: 25 ±5°C Number of cycle 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