



CPTC Thermistor

PRODUCT DATA

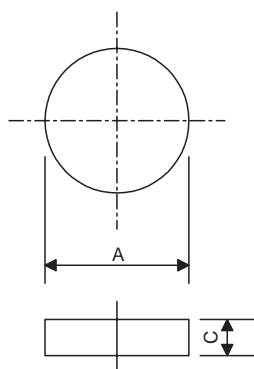
■ Heating

- Features
 1. Self-regulating heating element
 2. Contant 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

PHC Series



(Unit: mm)



● Characteristics

PHC 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)	C±0.2(mm)
PHC08102□P3B7	30	50	1000	240	270	8	3
PHC13150□PJ60	65	75	15	42	60	13	1.5
PHC13102□PIB7	55	75	1000	240	270	13	2.3
PHC08100□A030	100	110	10	24	30	8	1.5
PHC08180□A030	100	110	18	24	30	8	1.5
PHC10180□A060	100	110	18	42	60	10	2.5
PHC08102□A1B7	110	130	1000	240	270	8	2.3
PHC20102□A1B7	110	130	1000	240	270	20	2.3
PHC10501□A3B7	130	150	500	240	270	10	2.3
PHC13360□A430	140	150	36	24	30	13	1.3
PHC10501□AGB7	135	155	500	240	270	10	2.3
PHC10102□AGB7	135	155	1000	240	270	10	2.3
PHC13680□AH60	145	155	68	42	60	13	1.3
PHC17150□A560	150	160	15	42	60	17	1.4
PHC20102□A4B7	140	160	1000	240	270	20	2.3
PHC10201□A5B7	150	170	200	220/240	270	10	2.3
PHC10301□A6A4	160	175	300	110	140	10	2.3
PHC10102□AJB7	165	180	1000	240	270	10	2.3
PHC203R6□A760	170	180	3.6	42	60	20	1.4
PHC10501□A7B7	170	185	500	240	270	10	2.3
PHC14501□AKB7	175	190	500	220/240	270	14	2.3
PHC13152□BEB7	215	230	1500	240	270	13	2.5
PHC13152□BGB7	235	250	1500	240	270	13	2.5
PHC20362□BGB7	235	250	3600	240	270	20	2.5

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: $25 \pm 5^\circ C$ Number of cycle 10,000 or 100,000	IEC 60738-1
Damp Heat Steady State	Temperature: $40 \pm 5^\circ C$ Relative humidity of air: 95~98%Rh Duration: 1000 hrs	IEC 60068-2-3 Test C _a



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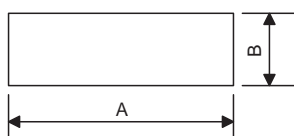
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● Dimensions

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±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

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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