



# CPTC Thermistor

## PRODUCT DATA

### ■ Motor Starting

#### ● Features

1. Two versions available  
PSA versions are uncased , metallized disk for clamp-contacting  
PSB versions are cased
2. Voltage ratings: from 120V to 500V
3. Stable over a long life
4. No noise generated

#### ● Recommended Applications

1. Home appliances (Fridge, Air conditioner)

#### ● Approvals



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



- \* TUV Certificate No. R50031360 & R50030891



- \* CQC Certificate No. CQC 03001008127 & CQC 03001008128

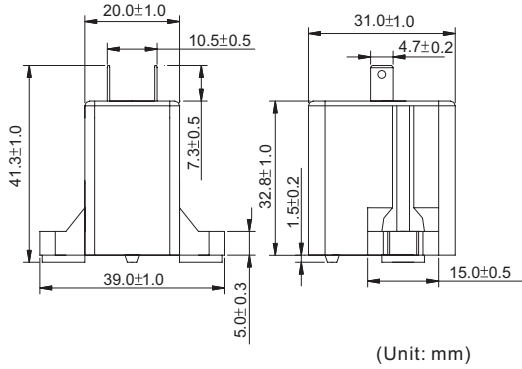




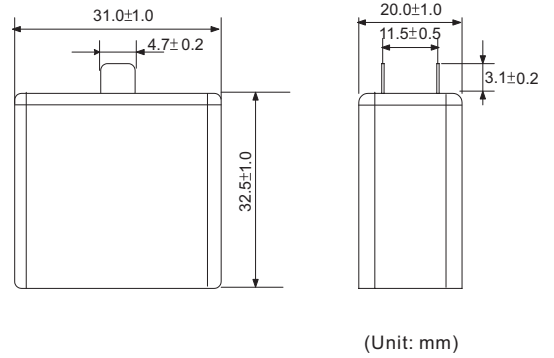
## ● Dimensions

PSB Series

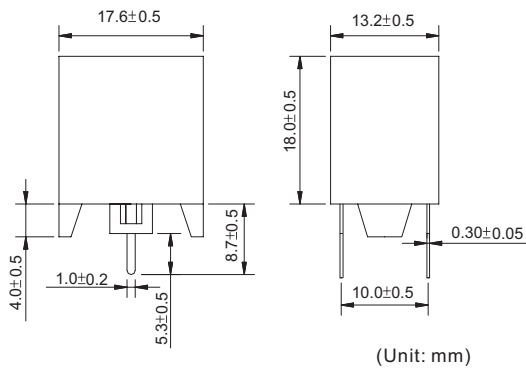
PSB□□□□□□□□01



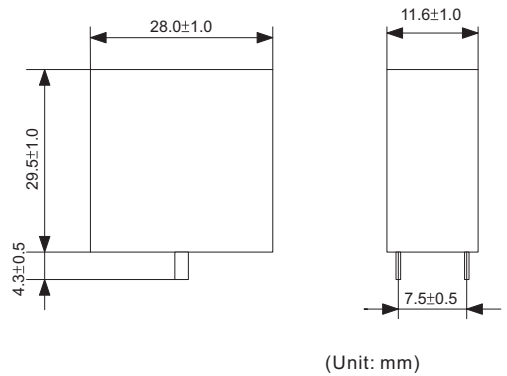
PSB□□□□□□□□02



PSB□□□□□□□□03



PSB□□□□□□□□09





● Characteristics

PSB Series

Part No.	Curie Temperature	Nominal Zero-power Resistance	Maximum Voltage	Maximum Current	Operating Time	Equilibrium Power	Recovery Time	Reference Coil Resistance
	T <sub>c</sub> (°C)	R <sub>25</sub> (Ω)	V <sub>max</sub> (V)	I <sub>max</sub> (A)	t <sub>o</sub> (s)	P <sub>max</sub> (W)	t <sub>rmax</sub> (s)	R <sub>ref</sub> (Ω)
PSB100□A2B2**	120±10	10	220	9	0.4-2.0	5	130	25
PSB150□A2B5**		15	250	8	0.4-2.0	5	130	25
PSB220□A2C0**		22	300	7	0.4-2.0	5	130	25
PSB330□A2C5**		33	350	6	0.2-2.0	5	130	30
PSB400□A2C0**		40	300	5	0.2-1.5	4	120	25
PSB470□A2D0**		47	400	5	0.2-1.5	4	120	25
PSB101□A2E0**		100	500	4	0.2-1.5	4	95	10
PSB330□A2B503		33	250	4.5	0.1-0.5	2.3	60	30
PSB400□A2B503		40	250	4	0.1-0.5	2.3	60	30
PSB470□A2B503		47	250	4	0.1-0.5	2.3	60	30
PSB150□A3B5**	130±10	15	250	8	0.4-2.0	5	120	15
PSB220□A3C0**		22	300	7	0.4-2.0	5	120	25
PSB330□A3C5**		33	350	6	0.2-2.0	5	120	25
PSB470□A3B5**		47	250	5	0.2-2.0	5	120	25

Note1: □=Tolerance of R<sub>25</sub>

Note2: \*\*= Special code for 01 , 02 or 09



● Reliability Test

Item	Test Condition / Methods	Standard
Resistance to Soldering Heat	Temperature: $350 \pm 5^{\circ}\text{C}$ Duration: 3~4 s	IEC60068-2-20 Test T <sub>b</sub>
Robustness of Termination	Tensile, bending and torsion tests as appropriate to type termination	IEC60068-2-21
Rapid Change of Temperature	T <sub>A</sub> =LCT T <sub>B</sub> =UCT Number of cycles:5 Duration: 30 min	IEC60068-2-14 Test N <sub>a</sub>
Vibration	Frequency : 10-55 Hz h = 0.75 min Duration: 6 h	IEC 60068-2-6 Test F <sub>c</sub>
Shock	Pulse shape: half-sine Acceleration: 50m/s <sup>2</sup> Pulse duration: 30 ms	IEC 60068-2-27 Test E <sub>a</sub>
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 B <sub>a</sub> IEC 60068-2-30 Test D <sub>b</sub> IEC 60068-2-1 Test A <sub>a</sub>
Temperature Coefficient of Resistance	$\alpha_T = \ln(R_{Tc+25}/R_{Tc+10}) / 15$ R <sub>Tc</sub> =2R <sub>min</sub>	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 <sub>max</sub> Temperature: UCT Series resistor: R <sub>ref</sub> Duration: 1000 hrs	IEC 60738-1
Endurance at Room Temperature (Cycling)	Voltage: V <sub>max</sub> Temperature: 25 ±5°C Series resistor : R <sub>ref</sub> Number of cycle 10,000、100,000 or 200,000	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 <sub>a</sub>