

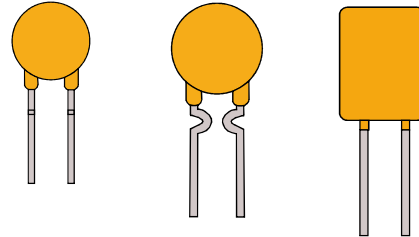
## Radial Leaded | Round/Square size

## PR250 Series

### Polymer Positive Temperature Coefficient Thermistor

#### Features

- Low voltage over-current protection
- Working current: 0.03A-2.0A
- Impulse voltage: 250V
- In line with RoHS certification, halogen-free product
- Tinned copper clad steel wire(0.03~1.4A)/ Tinned Copper wire(2.0A)



#### Electrical Performance

Product model	IH (A)	IT (A)	Vmax (V)	Imax (A)	Max Time Trip		Pd typ (W)	RMin (Ω)	R1Max (Ω)
					(A)	(S)			
PR250-003	0.03	0.08	250	3	0.15	10.0	1.0	40.00	153.00
PR250-004	0.04	0.12	250	3	0.20	10.0	1.0	33.00	110.50
PR250-005	0.05	0.12	250	3	0.25	10.0	1.0	24.00	102.00
PR250-006	0.06	0.12	250	3	0.30	10.0	1.0	22.00	54.40
PR250-008	0.08	0.16	250	3	0.40	10.0	1.0	14.00	37.40
PR250-009	0.09	0.18	250	3	0.45	10.0	1.0	10.00	34.00
PR250-011	0.11	0.22	250	3	0.55	15.0	1.0	7.00	18.70
PR250-012	0.12	0.24	250	3	0.60	15.0	1.0	8.00	20.40
PR250-0145	0.145	0.29	250	3	0.725	15.0	1.0	3.50	11.05
PR250-018	0.18	0.50	250	3	0.90	15.0	1.5	0.80	5.10
PR250-020	0.20	0.40	250	3	1.00	15.0	1.5	1.50	5.44
PR250-030	0.30	0.60	250	3	1.50	15.0	1.5	0.90	2.38
PR250-035	0.35	0.70	250	3	1.75	10.0	1.5	0.80	2.55
PR250-040	0.40	0.80	250	3	2.00	10.0	2.5	0.75	1.87
PR250-050	0.50	1.00	250	5	2.50	15.0	3.0	0.50	1.36
PR250-060	0.60	1.20	250	5	3.00	10.0	3.0	0.50	1.275
PR250-080	0.80	1.60	250	5	4.00	10.0	3.5	0.45	1.05
PR250-100	1.00	2.00	250	5	5.00	10.0	4.0	0.28	0.765
PR250-120	1.20	2.40	250	10	6.00	15.0	4.2	0.17	0.42
PR250-140	1.40	2.80	250	10	7.00	20.0	4.5	0.18	0.375
PR250-200	2.00	4.00	250	10	10.0	25.0	5.0	0.12	0.285

$I_H$  = Hold current: maximum current at which the device will not trip at 23°C still air.  
 $I_T$  = Trip current: minimum current at which the device will always trip at 23°C still air.  
 $V_{max}$  = Maximum continuous voltage device can withstand without damage at rated current  
 $I_{max}$  = Maximum fault current device can withstand without damage at rated voltage.

$T_{trip}$  = Maximum time to trip(s) at assigned current.  
 $Pd_{typ}$  = Typical power dissipation: typical amount of power dissipated by the device when in state air environment.  
 $R_{min}$  = Minimum resistance of device in initial (un-soldered) state.  
 $R1_{max}$  = Maximum resistance of device at 23°C measured one hour after reflow.

**Noted: All electrical function test is conducted after PCB mounted.**

# Radial Leaded | Round/Square size

## Polymer Positive Temperature Coefficient

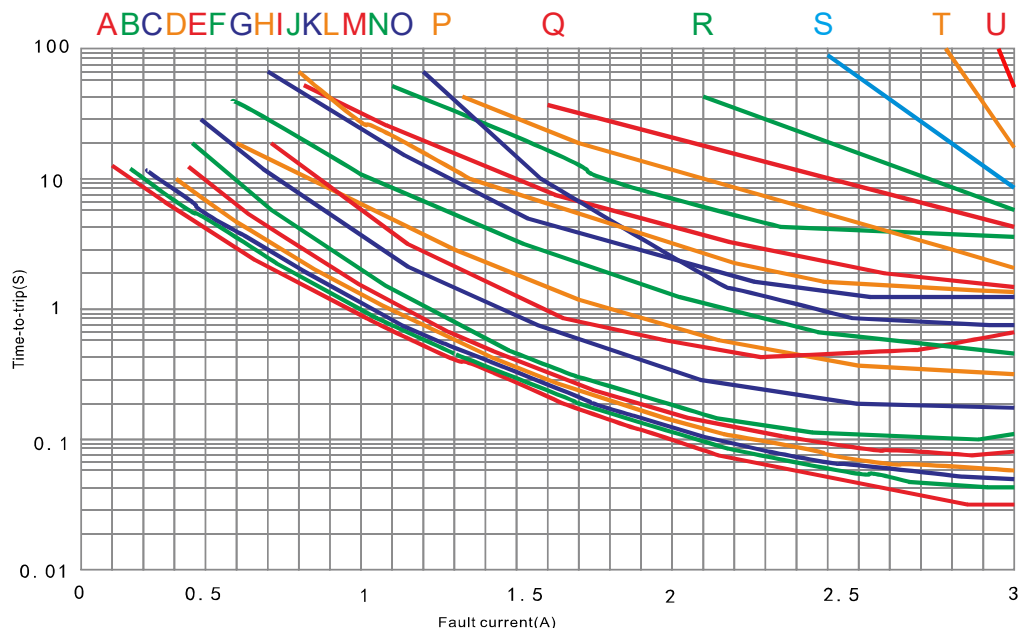
## PR250 Series

Thermal Derating Chart Hold Current (A)

Part Number	Ambient Operating Temperature								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
PR250-003	0.047	0.041	0.036	0.030	0.025	0.022	0.019	0.016	0.012
PR250-004	0.063	0.055	0.048	0.040	0.033	0.029	0.026	0.022	0.016
PR250-005	0.079	0.069	0.060	0.050	0.042	0.037	0.032	0.027	0.020
PR250-006	0.095	0.083	0.071	0.060	0.050	0.044	0.038	0.032	0.024
PR250-008	0.126	0.110	0.095	0.080	0.066	0.058	0.051	0.043	0.032
PR250-009	0.142	0.124	0.107	0.090	0.075	0.066	0.058	0.049	0.036
PR250-011	0.174	0.152	0.131	0.110	0.091	0.080	0.070	0.059	0.044
PR250-012	0.190	0.166	0.143	0.120	0.100	0.088	0.077	0.065	0.048
PR250-0145	0.229	0.200	0.173	0.145	0.120	0.106	0.093	0.078	0.058
PR250-018	0.284	0.248	0.214	0.180	0.149	0.131	0.115	0.097	0.072
PR250-020	0.316	0.274	0.238	0.200	0.166	0.146	0.128	0.108	0.080
PR250-030	0.474	0.414	0.357	0.300	0.249	0.219	0.192	0.162	0.120
PR250-035	0.553	0.483	0.417	0.350	0.291	0.256	0.224	0.189	0.140
PR250-040	0.632	0.552	0.476	0.400	0.332	0.292	0.256	0.216	0.160
PR250-050	0.790	0.690	0.595	0.500	0.415	0.365	0.320	0.270	0.200
PR250-060	0.948	0.828	0.714	0.600	0.498	0.438	0.384	0.324	0.240
PR250-080	1.264	1.104	0.952	0.800	0.664	0.584	0.512	0.432	0.320
PR250-100	1.580	1.380	1.190	1.000	0.830	0.730	0.640	0.540	0.400
PR250-120	1.896	1.656	1.428	1.200	0.996	0.876	0.768	0.648	0.480
PR250-140	2.212	1.932	1.666	1.600	1.162	1.022	0.896	0.756	0.560
PR250-200	3.160	2.760	2.380	2.000	1.660	1.460	1.280	1.080	0.800

Typical time to trip at 23°C

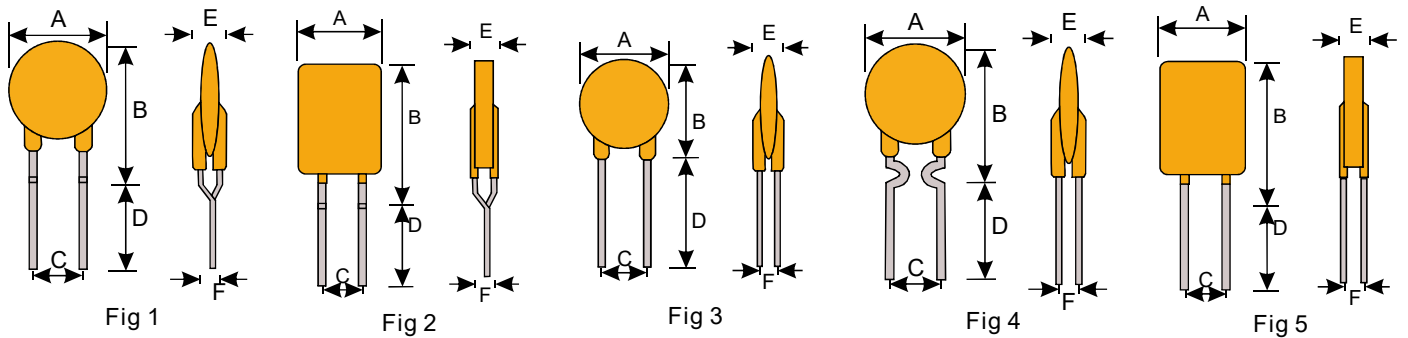
- A=PR250-003
- B=PR250-004
- C=PR250-005
- D=PR250-006
- E=PR250-008
- F=PR250-009
- G=PR250-011
- H=PR250-012
- I=PR250-0145
- J=PR250-018
- K=PR250-020
- L=PR250-030
- M=PR250-035
- N=PR250-040
- O=PR250-050
- P=PR250-060
- Q=PR250-080
- R=PR250-100
- S=PR250-120
- T=PR250-140
- U=PR250-200



# Radial Led | Round/Square size

## Polymer Positive Temperature Coefficient

## PR250 Series



### Size(mm)

Product model	A	B	C	D	E	F	Lead	FIG	Package QTY
	max	max	typ	min	max	typ	Φ		
PR250-003	7.00	12.80	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-004	7.00	12.80	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-005	7.00	12.80	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-006	7.00	12.80	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-008	7.00	12.80	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-009	7.00	12.80	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-011	7.00	13.50	5.10	7.60	4.40	/	0.60	2	1000PCS
PR250-012	7.00	13.50	5.10	7.60	4.40	/	0.60	2	1000PCS
PR250-0145	7.00	13.50	5.10	7.60	4.40	/	0.60	2	1000PCS
PR250-018	9.00	15.50	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-020	9.00	15.50	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-030	9.00	15.50	5.10	7.60	4.40	/	0.60	1	1000PCS
PR250-035	9.50	15.50	5.10	7.60	4.40	2.20	0.60	1	1000PCS
PR250-040	10.00	16.40	5.10	7.60	4.40	2.20	0.60	4	500PCS
PR250-050	11.00	15.80	5.10	7.60	4.40	2.20	0.80	3	500PCS
PR250-060	11.00	15.80	5.10	7.60	4.40	2.20	0.80	3	500PCS
PR250-080	11.00	15.80	5.10	7.60	4.40	2.20	0.80	3	500PCS
PR250-100	14.00	19.10	5.10	7.60	4.40	2.20	0.80	3	500PCS
PR250-120	16.00	21.00	5.10	7.60	4.40	2.20	0.80	3	500PCS
PR250-140	17.10	21.60	5.10	7.60	4.40	2.20	0.80	3	500PCS
PR250-200	21.00	25.00	10.20	7.60	4.40	2.20	0.80	5	200PCS

### Regular Service Condition

1. Operating ambient temperature:-40°C~85°C.
2. Exceeding the applicable conditions of this product or other improper use may cause damage, or even cause electric breakdown or flame.
3. PPTC components are designed for occasional over-current in the circuit and are not recommended for continuous and continuous over-current circuits.
4. Avoid contact of PPTC components with chemical solvents. Prolonged contact will damage the performance of the components.