

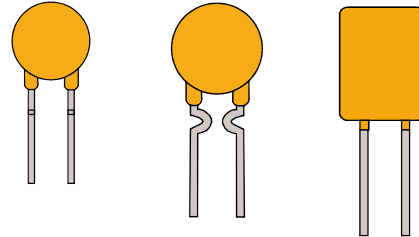
Radial Leaded | Round/Square size

PX72 & PX90 Series

Polymer Positive Temperature Coefficient Thermistor

Features

- Low voltage over-current protection
- Working current: 0.03A-5.0A
- Impulse voltage: 72V & 90V
- In line with RoHS certification, halogen-free product
- Tinned copper clad steel wire(0.03~1.85A)/ Tinned Copper wire(2.5A~5.0A)



Electrical Performance

Product model	IH (A)	IT (A)	Vmax (V)	Imax (A)	Max Time Trip		Pd typ (W)	RMin (Ω)	R1Max (Ω)
					(A)	(S)			
PX72-003	0.03	0.09	72	40	0.15	10.0	1.00	33.00	110.5
PX72-005	0.05	0.15	72	40	0.25	10.0	1.00	7.50	44.20
PX72-010	0.10	0.25	72	40	0.50	10.0	1.00	2.50	6.75
PX72-017	0.17	0.35	72	40	0.85	10.0	1.00	2.00	4.80
PX72-017R	0.17	0.35	72	40	0.85	10.0	1.00	3.30	7.82
PX72-020	0.20	0.40	72	40	1.00	10.0	1.00	1.50	4.26
PX72-025	0.25	0.50	72	40	1.25	10.0	1.00	1.00	2.93
PX72-030	0.30	0.60	72	40	1.50	10.0	1.00	0.76	2.04
PX72-040	0.40	0.80	72	40	2.00	10.0	1.00	0.52	1.29
PX72-050	0.50	1.00	72	40	2.50	10.0	1.00	0.41	1.16
PX72-065	0.65	1.30	72	40	3.25	10.0	1.00	0.27	0.72
PX72-075	0.75	1.50	72	40	3.75	10.0	1.00	0.18	0.60
PX72-090	0.90	1.80	72	40	4.50	10.0	1.00	0.14	0.465
PX90-110	1.10	2.20	90	40	5.50	10.0	1.51	0.14	0.375
PX90-135	1.35	2.70	90	40	6.75	10.0	1.71	0.12	0.285
PX90-160	1.60	3.20	90	40	8.00	11.4	1.98	0.09	0.210
PX90-185	1.85	3.70	90	40	9.25	12.6	2.10	0.08	0.180
PX90-250	2.50	5.00	90	40	12.50	15.6	2.50	0.05	0.120
PX90-300	3.00	6.00	90	40	15.00	19.8	2.80	0.04	0.090
PX90-375	3.75	7.50	90	40	18.75	24.0	3.20	0.03	0.075
PX90-500	5.00	10.00	90	40	25.00	30.0	3.50	0.02	0.075

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.
 P_{dtyp} = 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.
 R_{1max} = Maximum resistance of device at 23°C measured one hour after reflow.

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

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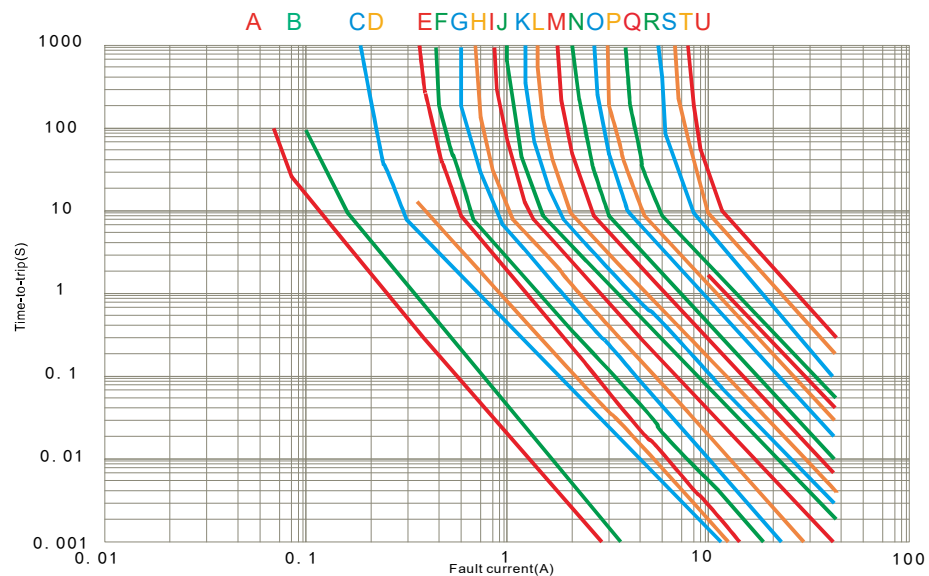
PX90 Series

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
PX72-003	0.047	0.041	0.036	0.030	0.024	0.021	0.018	0.015	0.011
PX72-005	0.079	0.069	0.060	0.050	0.041	0.035	0.030	0.025	0.018
PX72-010	0.158	0.138	0.119	0.100	0.081	0.070	0.060	0.050	0.036
PX72-017	0.269	0.235	0.202	0.170	0.138	0.119	0.102	0.085	0.061
PX72-017R	0.269	0.235	0.202	0.170	0.138	0.119	0.102	0.085	0.061
PX72-020	0.316	0.276	0.238	0.200	0.162	0.140	0.120	0.100	0.072
PX72-025	0.395	0.345	0.298	0.250	0.203	0.175	0.150	0.125	0.090
PX72-030	0.474	0.414	0.357	0.300	0.243	0.210	0.180	0.150	0.108
PX72-040	0.632	0.552	0.476	0.400	0.324	0.280	0.240	0.200	0.144
PX72-050	0.790	0.690	0.595	0.500	0.405	0.350	0.300	0.250	0.180
PX72-065	1.027	0.897	0.774	0.650	0.527	0.455	0.390	0.325	0.234
PX72-075	1.185	1.035	0.893	0.750	0.508	0.525	0.450	0.375	0.270
PX72-090	1.422	1.242	1.071	0.900	0.729	0.630	0.540	0.450	0.324
PX90-110	1.738	1.518	1.309	1.100	0.891	0.770	0.660	0.550	0.396
PX90-135	2.133	1.863	1.607	1.350	1.094	0.945	0.810	0.675	0.486
PX90-160	2.528	2.208	1.904	1.600	1.296	1.120	0.960	0.800	0.576
PX90-185	2.923	2.553	2.202	1.850	1.499	1.295	1.110	0.925	0.666
PX90-250	3.950	3.450	2.975	2.500	2.025	1.750	1.500	1.250	0.900
PX90-300	4.740	4.140	3.000	3.000	2.430	2.100	1.800	1.500	1.080
PX90-375	5.925	5.175	3.750	3.750	3.038	2.625	2.250	1.875	1.350
PX90-500	7.900	6.900	5.950	5.000	4.050	3.500	3.000	2.500	1.800

Typical time to trip at 23°C

- A=PX72-003
- B=PX72-005
- C=PX72-010
- D=PX72-017
- E=PX72-017R
- F=PX72-020
- G=PX72-025
- H=PX72-030
- I=PX72-040
- J=PX72-050
- K=PX72-065
- L=PX72-075
- M=PX72-090
- N=PX90-110
- O=PX90-135
- P=PX90-160
- Q=PX90-185
- R=PX90-250
- S=PX90-300
- T=PX90-375
- U=PX90-500

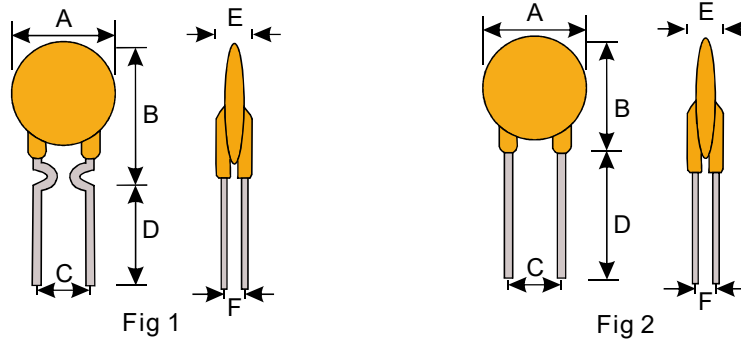


Radial Led | Round/Square size

Polymer Positive Temperature Coefficient

PX90 Series

Size(mm)



Product model	A	B	C	D	E	F	Lead	FIG	Package QTY
	max	max	typ	min	max	typ	Φ		
PX72-003	7.40	12.00	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-005	7.40	12.00	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-010	7.40	12.00	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-017	7.40	12.00	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-017R	7.40	13.00	5.10	7.60	3.50	1.10	0.50	1	1000PCS
PX72-020	7.40	12.00	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-025	7.40	12.00	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-030	7.40	13.00	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-040	7.60	13.50	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-050	7.90	13.70	5.10	7.60	3.10	1.10	0.50	1	1000PCS
PX72-065	9.40	15.60	5.10	7.60	3.10	1.20	0.60	1	1000PCS
PX72-075	10.20	16.40	5.10	7.60	3.10	1.20	0.60	1	1000PCS
PX72-090	11.20	17.70	5.10	7.60	3.10	1.20	0.60	1	1000PCS
PX90-110	12.80	16.70	5.10	7.60	3.10	1.40	0.80	2	1000PCS
PX90-135	14.50	18.70	5.10	7.60	3.10	1.40	0.80	2	500PCS
PX90-160	16.30	20.50	5.10	7.60	3.10	1.40	0.80	2	500PCS
PX90-185	17.50	21.60	5.10	7.60	3.10	1.40	0.80	2	500PCS
PX90-250	21.00	25.30	10.20	7.60	3.10	1.40	0.80	2	300PCS
PX90-300	24.50	28.60	10.20	7.60	3.10	1.40	0.80	2	200PCS
PX90-375	27.20	31.80	10.20	7.60	3.10	1.40	0.80	2	100PCS
PX90-500	27.20	31.80	10.20	7.60	3.10	1.40	0.80	2	100PCS

Regular Service Condition

1. Operating ambient temperature:-40℃~85℃.
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.