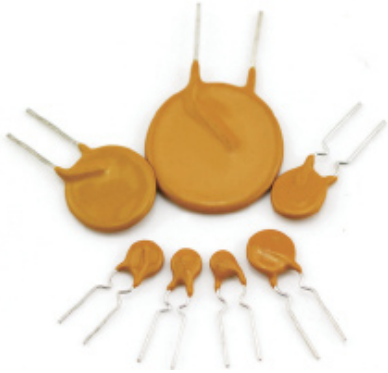




RX 72V Series

Radial Leaded PTC



Application:	Load protection on wide range of low voltage power supplies, computers, computer peripherals, general electronics
Product Features:	Low hold current, Solid state, Radial leaded product ideal for up to 72V
Operation Current:	200mA~5A
Maximum Voltage:	Up to 72V
Temperature Range:	-40°C to 85°C
Agency Recognition:	UL, C-UL

Electrical Characteristics (25°C)

Part Number	Hold Current	Trip Current	Max. Time to Trip		Maximum Current	Rated Voltage	Typical Power	Resistance Tolerance	
			Current (A)	Time (S)				RMIN	R1MAX
	IH, A	IT, A			IMAX, A	VMAX, VDC	Pd, W	ohms	ohms
RX020-72	0.20	0.40	1.00	2.2	40	72	0.41	1.25	4.40
RX025-72	0.25	0.50	1.25	2.5	40	72	0.45	0.65	3.00
RX030-72	0.30	0.72	1.50	3.0	40	72	0.49	0.45	2.10
RX040-72	0.40	0.80	2.00	3.8	40	72	0.56	0.40	1.29
RX050-72	0.50	1.00	2.50	4.0	40	72	0.77	0.35	1.17
RX065-72	0.65	1.30	3.25	5.3	40	72	0.88	0.25	0.72
RX075-72	0.75	1.50	3.75	6.3	40	72	0.92	0.25	0.62
RX090-72	0.90	1.80	4.50	7.2	40	72	0.99	0.20	0.49
RX110-72	1.10	2.20	5.50	8.2	40	72	1.50	0.15	0.40
RX135-72	1.35	2.70	6.75	9.6	40	72	1.70	0.12	0.32
RX160-72	1.60	3.20	8.00	11.4	40	72	1.90	0.09	0.24
RX185-72	1.85	3.70	9.25	12.6	40	72	2.10	0.08	0.21
RX250-72	2.50	5.00	12.50	15.6	40	72	2.50	0.04	0.13
RX300-72	3.00	6.00	15.00	19.8	40	72	2.80	0.03	0.10
RX375-72	3.75	7.50	18.75	24.0	40	72	3.20	0.02	0.08
RX500-72	5.00	10.0	18.75	24.0	40	72	3.20	0.02	0.08

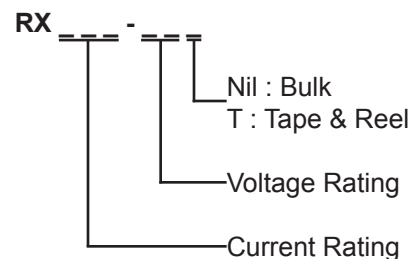
IH=Hold current-maximum current at which the device will not trip at 25°C still air.
 IT=Trip current-minimum current at which the device will always trip at 25°C still air.
 V MAX=Maximum voltage device can withstand without damage at its rated current.
 I MAX= Maximum fault current device can withstand without damage at rated voltage (V max).
 Pd=Typical power dissipated from device when in the tripped state in 25°C still air environment.
 RMIN=Minimum device resistance at 25°C.
 R1MAX=Maximum device resistance is measured one hour post reflow.

Environmental Specifications

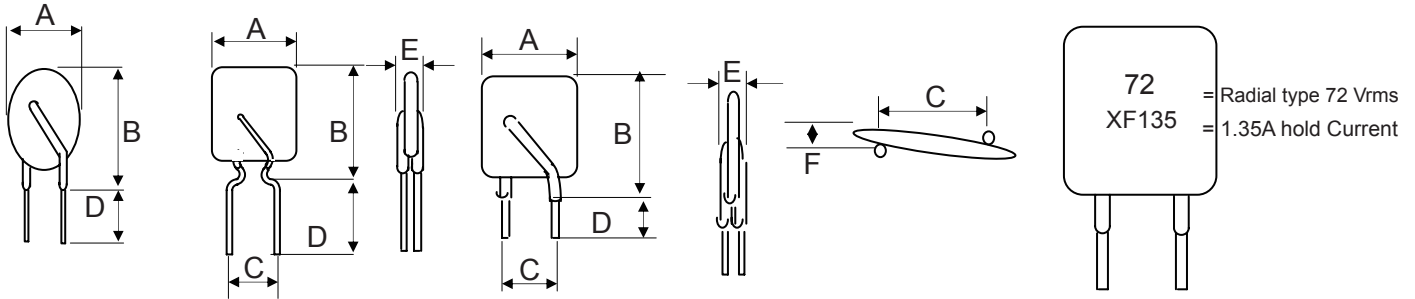
Test	Conditions	Resistance Change
Passive Aging	+85°C, 1000 hrs.	±5% typical
Humidity Aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal Shock	+85°C to -40°C, 20 times	±33% typical
Resistance to Solvent	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-202, Method 201	No change
Maximum surface temperature of the device in the tripped state is 125°C		

Specifications are subject to change without notice. Customer should verify actual device performance in their specific applications.

Part Numbering System



RX Product Dimensions (Millimeters)



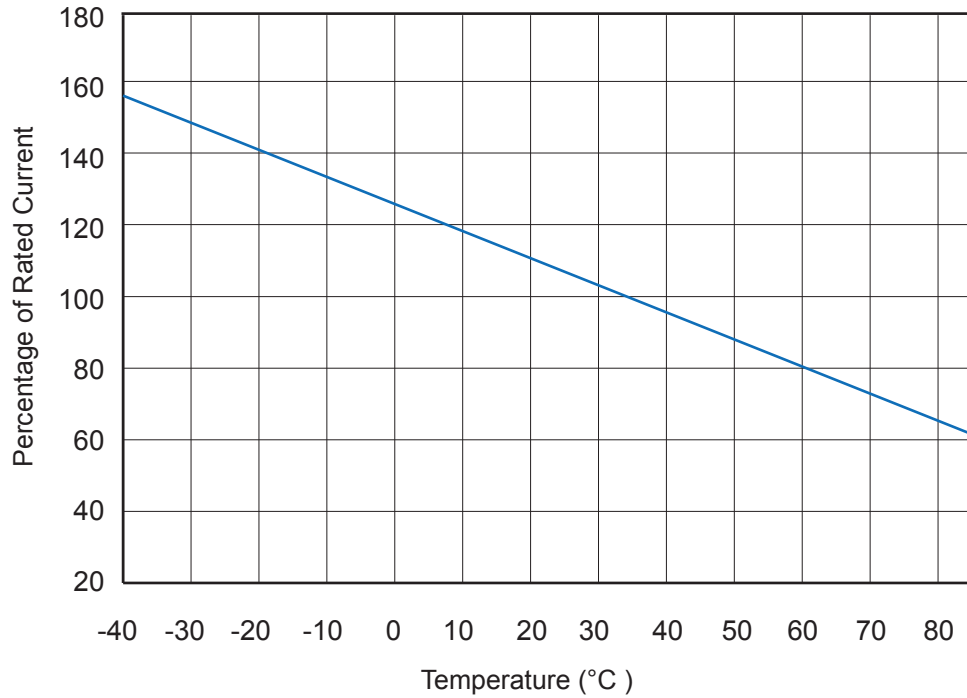
Part Number	A	B	C	D	E	F	Lead Style
	Maximum	Maximum	Typical	Minimum	Maximum	Maximum	
RX020-72	7.40	12.7	5.1	7.6	3.1	1.0	Kink
RX025-72	7.40	12.7	5.1	7.6	3.1	1.0	Kink
RX030-72	7.40	13.0	5.1	7.6	3.1	1.0	Kink
RX040-72	7.60	13.5	5.1	7.6	3.1	1.2	Kink
RX050-72	6.45	10.8	5.1	8.4	2.4	1.2	Kink
RX065-72	9.70	14.5	5.1	7.6	3.1	1.5	Kink
RX075-72	10.4	15.2	5.1	7.6	3.1	1.5	Kink
RX090-72	11.7	15.8	5.1	7.6	3.1	1.5	Kink
RX110-72	13.0	18.0	5.1	7.6	3.1	1.2	Straight
RX135-72	14.5	19.6	5.1	7.6	3.1	1.2	Straight
RX160-72	16.3	21.3	5.1	7.6	3.1	1.5	Straight
RX185-72	17.8	22.9	5.1	7.6	3.1	1.5	Straight
RX250-72	21.3	26.4	10.2	7.6	3.1	1.7	Straight
RX300-72	24.9	30.0	10.2	7.6	3.1	2.0	Straight
RX375-72	28.5	33.5	10.2	7.6	3.1	2.0	Straight
RX500-72	28.5	33.5	10.2	7.6	3.1	2.0	Straight



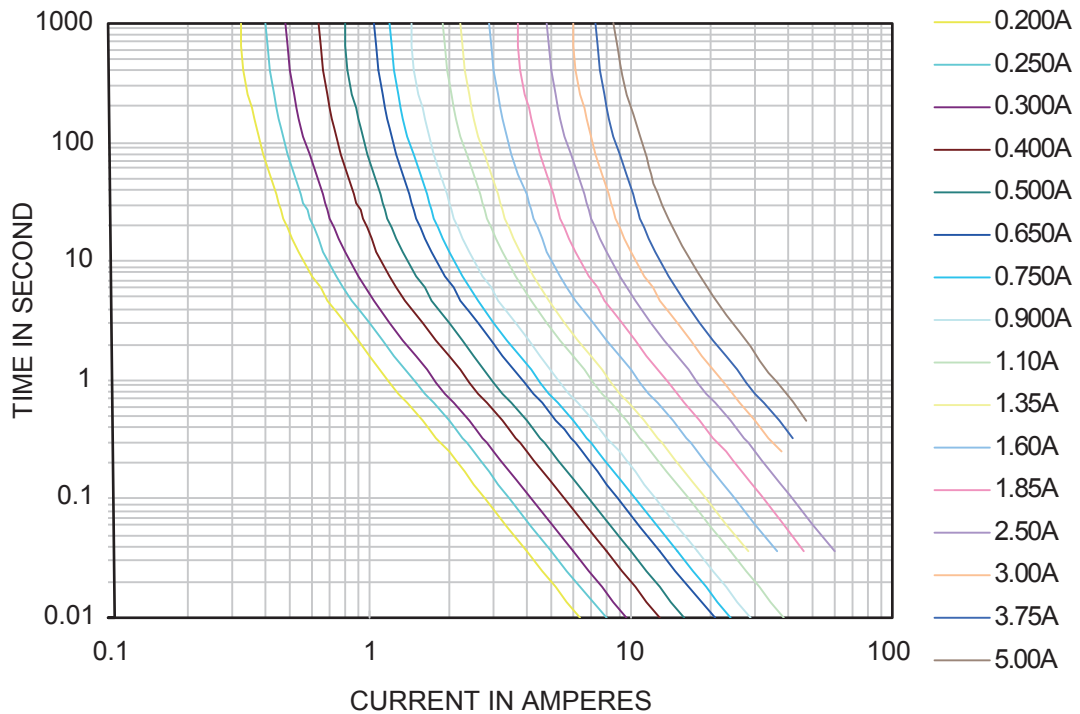
RX 72V Series

Radial Leaded PTC

Thermal Derating Curve



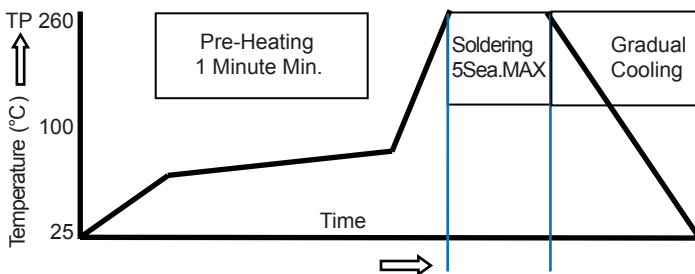
Average Time-Current Curve



I Hold Versus Temperature

Part Number	Maximum Ambient Operating Temperature (T _{mao}) vs Hold Current (I _{hold})								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
RX020-72	0.31	0.27	0.24	0.20	0.16	0.14	0.13	0.11	0.08
RX025-72	0.39	0.34	0.30	0.25	0.20	0.18	0.16	0.14	0.10
RX030-72	0.47	0.41	0.36	0.30	0.24	0.22	0.19	0.16	0.12
RX040-72	0.62	0.54	0.48	0.40	0.32	0.29	0.25	0.22	0.16
RX050-72	0.78	0.68	0.60	0.50	0.41	0.36	0.32	0.27	0.20
RX065-72	1.01	0.88	0.77	0.65	0.53	0.47	0.41	0.35	0.26
RX075-72	1.16	1.02	0.89	0.75	0.61	0.54	0.47	0.41	0.30
RX090-72	1.40	1.22	1.07	0.90	0.73	0.65	0.57	0.49	0.36
RX110-72	1.71	1.50	1.31	1.10	0.89	0.79	0.69	0.59	0.44
RX135-72	2.09	1.84	1.61	1.35	1.09	0.97	0.85	0.73	0.54
RX160-72	2.48	2.18	1.90	1.60	1.30	1.15	1.01	0.86	0.64
RX185-72	2.87	2.52	2.20	1.85	1.50	1.33	1.17	1.00	0.74
RX250-72	3.88	3.40	2.98	2.50	2.03	1.80	1.58	1.35	1.00
RX300-72	4.65	4.08	3.57	3.00	2.43	2.16	1.89	1.62	1.20
RX375-72	5.81	5.10	4.46	3.75	3.04	2.70	2.36	2.03	1.50
RX500-72	6.59	5.78	5.15	4.50	3.64	3.00	2.65	2.42	1.60

Soldering Parameters



Recommended reflow methods: IR, vapor phase oven, hot air oven, N₂ environment for lead-free

Recommended maximum paste thickness is 0.25mm

Devices can be cleaned using standard industry methods and solvents.

Note 1: All temperature refer to topside of the package, measured on the package body surface.

Note 2: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (T _s max to T _p)	3°C/second max.
Preheat -Temperature Min(T _s min) -Temperature Max(T _s max) -Time(T _s min to T _s max)	150°C 200°C 60~180 seconds
Time maintained above: -Temperature(T _L) -Time(t _L)	217°C 60~150 seconds
Peak Temperature(T _p)	260°C
Ramp-Down Rate	6°C / second max.
Time 25°C to Peak Temperature	8 minutes max.
Storage Condition	0°C ~ 35°C, ≤ 70% RH



RX 72V Series

Radial Leaded PTC

Standard Package

P/N	Pcs /Bag	Reel/Tape
RX020-72	500	3K
RX025-72	500	3K
RX030-72	500	3K
RX040-72	500	3K
RX050-72	500	3K
RX065-72	500	3K
RX075-72	500	3K
RX090-72	500	3K
RX110-72	500	1.5K
RX135-72	500	1.5K
RX160-72	500	1.5K
RX185-72	500	1.5K
RX250-72	500	1.5K
RX300-72	500	-
RX375-72	500	-
RX500-72	500	-

Tape & Reel packaging per EIA468-B standard.