


Features

- 72 V rated
- Radial leaded devices
- Cured, flame retardant epoxy polymer insulating material meets UL 94V-0 requirements
- RoHS compliant* and halogen free**
- Agency recognition: 

Applications

- Almost anywhere there is a low voltage power supply, up to 72 V and a load to be protected, including:
- Security and fire alarm systems
 - Loudspeakers
 - Power transformers

PRCP-RX/72 Series - Polymer Resettable Circuit Protectors

Electrical Characteristics

Model	V max. Volts	I max. Amps	I _{hold}	I _{trip}	Initial Resistance		1 Hour (R ₁) Post-Trip Resistance	Max. Time To Trip		Tripped Power Dissipation
			Amperes at 23 °C		Ohms at 23 °C		Ohms at 23 °C	Amperes at 23 °C	Seconds at 23 °C	Watts at 23 °C
			Hold	Trip	Min.	Max.	Max.			Typ.
PRCP-RX020/72	72	40	0.20	0.40	1.50	2.84	4.40	1.0	2.2	0.40
PRCP-RX025/72	72	40	0.25	0.50	1.00	1.95	3.00	1.25	2.5	0.45
PRCP-RX030/72	72	40	0.30	0.60	0.76	1.36	2.10	1.5	3.0	0.50
PRCP-RX040/72	72	40	0.40	0.80	0.52	0.86	1.29	2.0	3.9	0.55
PRCP-RX050/72	72	40	0.50	1.00	0.41	0.77	1.17	2.5	4.0	0.75
PRCP-RX065/72	72	40	0.65	1.30	0.27	0.48	0.72	3.25	5.3	0.90
PRCP-RX075/72	72	40	0.75	1.50	0.18	0.40	0.60	3.75	6.3	0.90
PRCP-RX090/72	72	40	0.90	1.80	0.14	0.31	0.47	4.5	7.2	1.00
PRCP-RX110/72	72	40	1.10	2.20	0.15	0.25	0.38	5.5	8.2	1.50
PRCP-RX135/72	72	40	1.35	2.70	0.12	0.19	0.30	6.75	9.6	1.70
PRCP-RX160/72	72	40	1.60	3.20	0.09	0.14	0.22	8.0	11.4	1.90
PRCP-RX185/72	72	40	1.85	3.70	0.08	0.12	0.19	9.25	12.6	2.10
PRCP-RX250/72	72	40	2.50	5.00	0.05	0.08	0.13	12.5	15.6	2.50
PRCP-RX300/72	72	40	3.00	6.00	0.04	0.06	0.10	15.0	19.8	2.80
PRCP-RX375/72	72	40	3.75	7.50	0.03	0.05	0.08	18.75	24.0	3.20

Environmental Characteristics

Operating/Storage Temperature	-40 °C to 85 °C
Maximum Device Surface Temperature	
in Tripped State	125 °C
Passive Aging	+85 °C, 1000 hours.....±5 % typical resistance change
Humidity Aging	+85 °C, 85 % R.H. 1000 hours.....±5 % typical resistance change
Thermal Shock	+85 °C to -55 °C, 10 times.....± 10% typical resistance change
Solvent Resistance	MIL-STD-202, Method 215.....No change
Vibration	MIL-STD-883C, Method 2007.1,.....No change Condition A

Test Procedures And Requirements For Model PRCP-RX/72 Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech	Verify dimensions and materials	Per P.R.C.P. physical description
Resistance	In still air @ 23°C	R _{min} ≤ R ≤ R ₁ max
Time to Trip	.5 times I _{hold} , V _{max} , 23 °C	T ≤ max. time to trip (seconds)
Hold Current	.30 min at I _{hold}	No trip
Trip Cycle Life	V _{max} , I _{max} , 100 cycles	No arcing or burning
Trip Endurance	V _{max} , 48 hours	No arcing or burning

UL File Number.....E300792
 TÜV Certificate Number.....R50421916

* RoHS Directive 2015/863 Mar. 31, 2015 and Annex.
 ** COPAL follows the prevailing definition of "halogen free" in the industry. COPAL considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Customers should verify actual device performance in their specific applications.

Additional Features

- Resettable circuit protection
- Bulk packaging, tape and reel available on most models

PRCP-RX/72 Series - Polymer Resettable Circuit Protectors

Product Dimensions

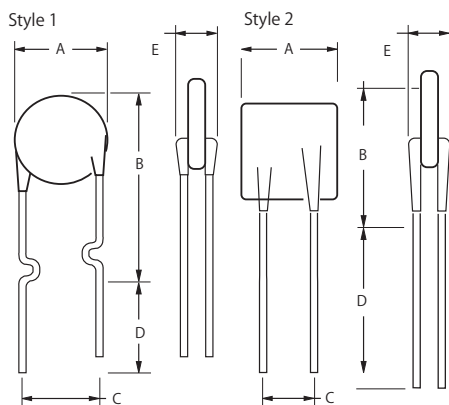
Model	A		B		C		D		E		Physical Characteristics		
	Max.	Max.	Nom.	Tol.±	Min.	Max.	Style	Lead Dia.	Material				
PRCP-RX020/72	7.4 (0.291)	12.7 (0.5)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	0.51 (0.020)	Sn/CuFe				
PRCP-RX025/72	7.4 (0.291)	12.7 (0.5)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	0.51 (0.020)	Sn/CuFe				
PRCP-RX030/72	7.4 (0.291)	13.4 (0.528)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	0.51 (0.020)	Sn/CuFe				
PRCP-RX040/72	7.4 (0.291)	13.7 (0.539)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	0.51 (0.020)	Sn/CuFe				
PRCP-RX050/72	7.9 (0.311)	13.7 (0.539)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	10.51 (0.420)	Sn/Cu				
PRCP-RX065/72	9.7 (0.382)	15.2 (0.598)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	0.51 (0.020)	Sn/Cu				
PRCP-RX075/72	10.4 (0.409)	16.0 (0.630)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	0.51 (0.020)	Sn/Cu				
PRCP-RX090/72	11.7 (0.461)	16.70 (0.657)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	1	0.51 (0.020)	Sn/Cu				
PRCP-RX110/72	10.84 (0.427)	16.84 (0.662)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	2	0.81 (0.032)	Sn/Cu				
PRCP-RX135/72	12.26 (0.483)	18.26 (0.718)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	2	0.81 (0.032)	Sn/Cu				
PRCP-RX160/72	13.94 (0.549)	19.94 (0.785)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	2	0.81 (0.032)	Sn/Cu				
PRCP-RX185/72	15.18 (0.598)	21.18 (0.833)	5.1 (0.201)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	2	0.81 (0.032)	Sn/Cu				
PRCP-RX250/72	17.84 (0.702)	23.84 (0.938)	10.2 (0.402)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	2	0.81 (0.032)	Sn/Cu				
PRCP-RX300/72	20.67 (0.814)	26.67 (1.050)	10.2 (0.402)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	2	0.81 (0.032)	Sn/Cu				
PRCP-RX375/72	23.51 (0.926)	29.51 (1.161)	10.2 (0.402)	0.7 (0.028)	7.6 (0.30)	3.1 (0.122)	2	0.81 (0.032)	Sn/Cu				

Packaging options:

BULK: 500 pcs. per bag.

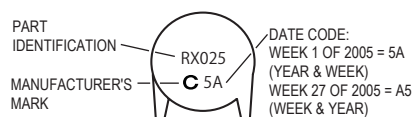
TAPE & REEL: PRCP-RX020/72-2 ~ PRCP-RX090/72-2 = 3000 pcs. per reel; PRCP-RX110/72-2 ~ PRCP-RX160/72-2 = 1500 pcs. per reel; PRCP-RX185/72-2 ~ PRCP-RX375/72-2 = 1000 pcs. per reel.

DIMENSIONS = $\frac{MM}{(INCHES)}$



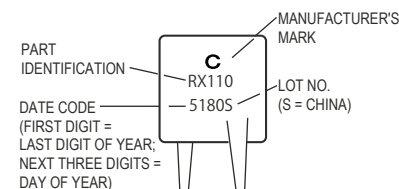
Typical Part Marking: RX020/72-RX025/72

Represents total content. Layout may vary.



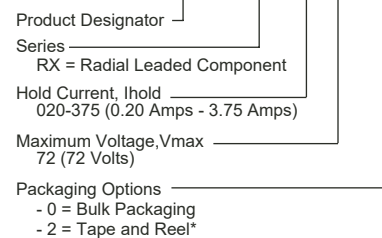
Typical Part Marking: RX030/72-RX375/72

Represents total content. Layout may vary.



How to Order

PRCP - RX 110/72 - 2



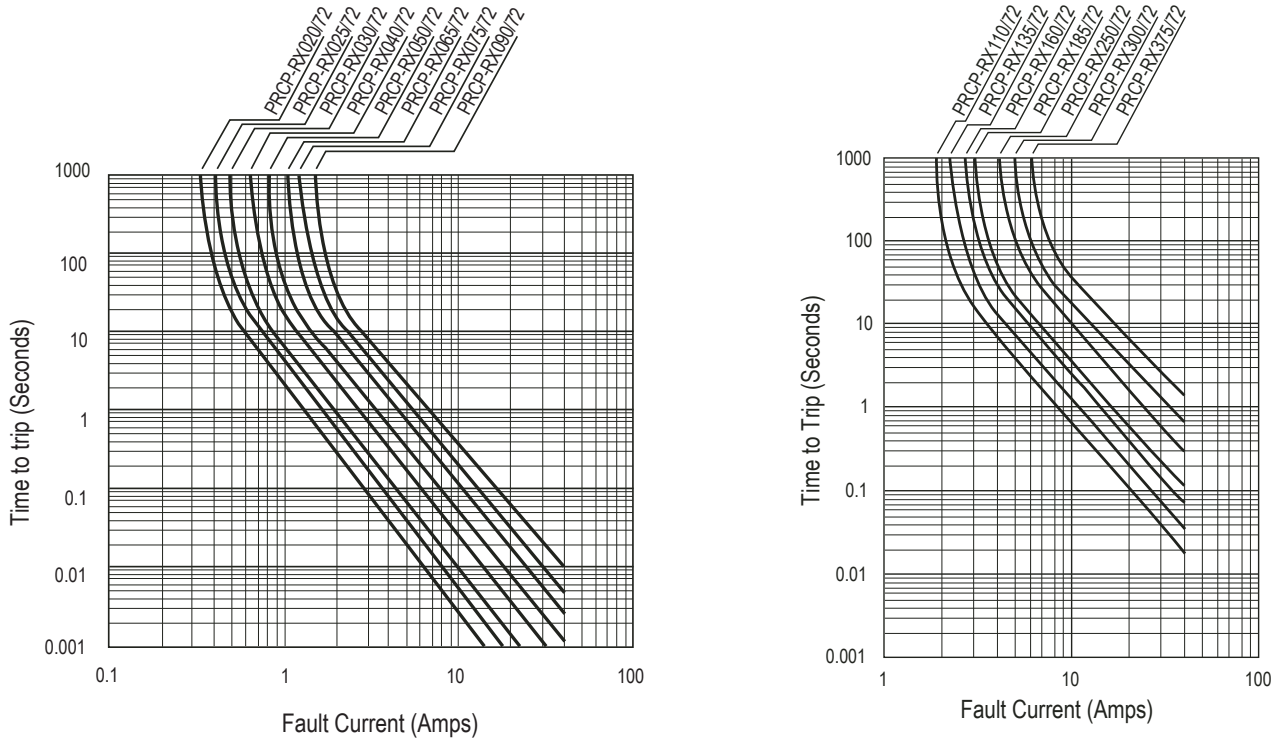
*Packaged per EIA 486-B

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Customers should verify actual device performance in their specific applications.

PRCP-RX/72 Series - Polymer Resettable Circuit Protectors

Typical Time to Trip at 23 °C



The Time to Trip curves represent typical performance of a device in a simulated application environment. Actual performance in specific customer applications may differ from these values due to the influence of other variables.

Thermal Derating Chart - I_{hold} (Amps)

Model	Ambient Operating Temperature								
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
PRCP-RX020/72	0.31	0.27	0.24	0.20	0.16	0.14	0.13	0.11	0.08
PRCP-RX025/72	0.39	0.34	0.30	0.25	0.20	0.18	0.16	0.14	0.10
PRCP-RX030/72	0.47	0.41	0.36	0.30	0.24	0.22	0.19	0.16	0.12
PRCP-RX040/72	0.62	0.54	0.48	0.40	0.32	0.29	0.25	0.22	0.16
PRCP-RX050/72	0.78	0.68	0.60	0.50	0.41	0.36	0.32	0.27	0.20
PRCP-RX065/72	1.01	0.88	0.77	0.65	0.53	0.47	0.41	0.35	0.26
PRCP-RX075/72	1.16	1.02	0.89	0.75	0.61	0.54	0.47	0.41	0.30
PRCP-RX090/72	1.40	1.22	1.07	0.90	0.73	0.65	0.57	0.49	0.36
PRCP-RX110/72	1.71	1.50	1.31	1.10	0.89	0.79	0.69	0.59	0.44
PRCP-RX135/72	2.09	1.84	1.61	1.35	1.09	0.97	0.85	0.73	0.54
PRCP-RX160/72	2.48	2.18	1.90	1.60	1.30	1.15	1.01	0.86	0.64
PRCP-RX185/72	2.87	2.52	2.20	1.85	1.50	1.33	1.17	1.00	0.74
PRCP-RX250/72	3.88	3.40	2.98	2.50	2.03	1.80	1.58	1.35	1.00
PRCP-RX300/72	4.65	4.08	3.57	3.00	2.43	2.16	1.89	1.62	1.20
PRCP-RX375/72	5.81	5.10	4.46	3.75	3.04	2.70	2.36	2.03	1.50

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Customers should verify actual device performance in their specific applications.

PRCP-RX/72 Series Tape and Reel Specifications

Devices taped using EIA468-B/IEC286-2 standards. See table below and Figures 1 and 2 for details.

Dimension Description	IEC Mark	EIA Mark	Dimensions	
			Dimensions	Tolerance
Carrier tape width	W	W	$\frac{18}{(0.709)}$	$-0.5/+1.0$ $(-0.02/+0.039)$
Hold down tape width	W ₀	W ₄	$\frac{11}{(0.433)}$	min.
Hold down tape			No protrusion	
Top distance between tape edges	W ₂	W ₆	$\frac{3}{(0.118)}$	max.
Sprocket hole position	W ₁	W ₅	$\frac{9}{(0.354)}$	$\frac{-0.5/+0.75}{(-0.02/+0.03)}$
Sprocket hole diameter	D ₀	D ₀	$\frac{4}{(0.157)}$	$\frac{\pm 0.2}{(\pm 0.0078)}$
Abscissa to plane (straight lead)	H	H	$\frac{18.5}{(0.728)}$	$\frac{\pm 3.0}{(\pm 0.118)}$
Abscissa to plane (kinked lead)	H ₀	H ₀	$\frac{16}{(0.63)}$	$\frac{\pm 0.5}{(\pm 0.02)}$
Abscissa to top (straight lead)	H ₁	H ₁	$\frac{38.0}{(1.496)}$	max.
Abscissa to top (kinked lead)	H ₁	H ₁	$\frac{32.2}{(1.268)}$	max.
Overall width w/lead protrusion (straight lead)		C ₁	$\frac{55.0}{(2.165)}$	max.
Overall width w/lead protrusion (kinked lead)		C ₁	$\frac{43.2}{(1.7)}$	max.
Overall width w/o lead protrusion (straight lead)		C ₂	$\frac{54.0}{(2.126)}$	max.
Overall width w/o lead protrusion (kinked lead)		C ₂	$\frac{42.5}{(1.673)}$	max.
Lead protrusion	I ₁	L ₁	$\frac{1.0}{(0.039)}$	max.
Protrusion of cutout	L	L	$\frac{11}{(0.433)}$	max.
Protrusion beyond hold-down tape	I ₂	I ₂	Not specified	
Sprocket hole pitch	P ₀	P ₀	$\frac{12.7}{(0.5)}$	$\frac{\pm 0.3}{(\pm 0.012)}$
Pitch tolerance			20 consecutive	$\frac{\pm 1}{(\pm 0.039)}$
Device pitch: PRCP-RX020/72-PRCP-RX185/72			$\frac{12.7}{(0.5)}$	$\frac{\pm 0.3}{(\pm 0.012)}$
Device pitch: PRCP-RX250/72-PRCP-RX375/72			$\frac{25.4}{(1.0)}$	$\frac{\pm 0.6}{(\pm 0.024)}$
Tape thickness	t	t	$\frac{0.9}{(0.035)}$	max.
Tape thickness with splice: PRCP-RX020/72-PRCP-RX185/72		t ₁	$\frac{1.5}{(0.059)}$	max.
Tape thickness with splice: PRCP-RX250/72-PRCP-RX375/72		t ₁	$\frac{2.3}{(0.091)}$	max.
Splice sprocket hole alignment			0	$\frac{\pm 0.3}{(\pm 0.012)}$
Body lateral deviation	Δh	Δh	0	$\frac{\pm 1}{(\pm 0.039)}$
Body tape plane deviation	Δp	Δp	0	$\frac{\pm 1.3}{(\pm 0.051)}$
Lead seating plane deviation	ΔP ₁	ΔP ₁	$\frac{3.81}{(0.015)}$	$\frac{\pm 0.7}{(\pm 0.028)}$
Lead spacing : PRCP-RX110/72-PRCP-RX185/72	F	F	$\frac{5.08}{(0.2)}$	$\frac{-0.2/+0.8}{(-0.006/+0.031)}$
Lead spacing : PRCP-RX250/72-PRCP-RX375/72	F	F	$\frac{10.2}{(0.402)}$	$\frac{-0.2/+0.8}{(-0.006/+0.031)}$

DIMENSIONS = $\frac{\text{MM}}{\text{(INCHES)}}$

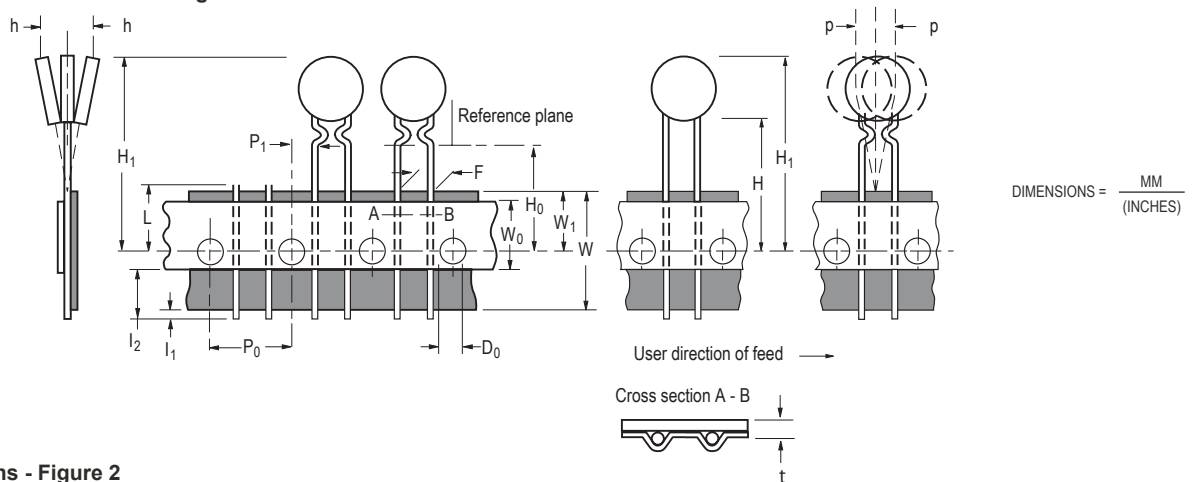
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Customers should verify actual device performance in their specific applications.

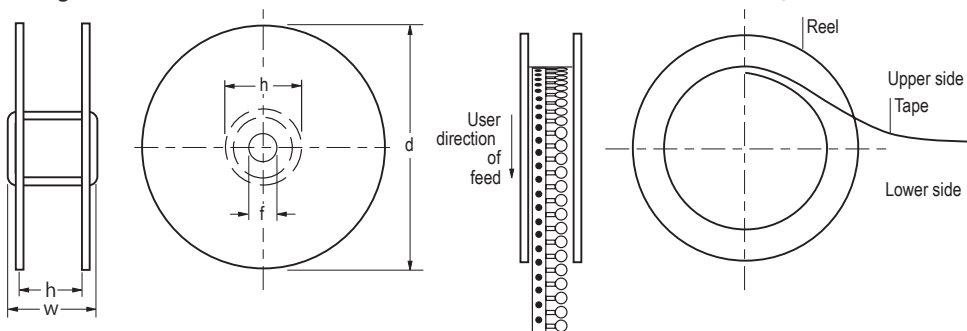
PRCP-RX/72 Series Tape and Reel Specifications

Dimension Description	IEC Mark	EIA Mark	Dimensions	
			Dimensions	Tolerance
Reel width	w	W ₂	56 (2.205)	max.
Reel diameter	d	a	370 (14.57)	max.
Space between flanges less device	W ₁	h	4.75 (0.187)	±3.25 (±0.128)
Arbor hole diameter	f	c	26.0 (1.024)	±12.0 (±0.472)
Core diameter	h	n	80 (3.15)	max.
Box			62 355 345 (2.44) (14.0) (13.6)	max.
Consecutive missing places			3	max.
Empty places per reel			Not specified	

Taped Component Dimensions - Figure 1



Reel Dimensions - Figure 2



Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Customers should verify actual device performance in their specific applications.