

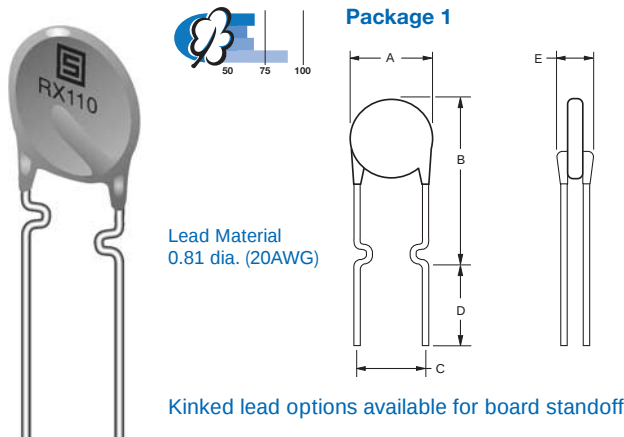
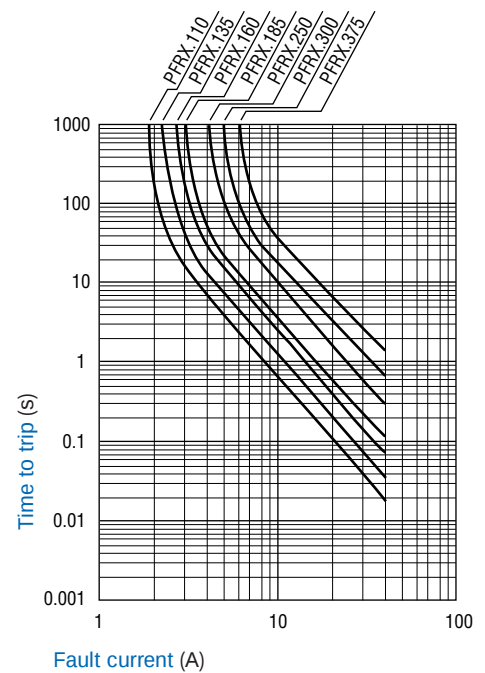
Wire leaded PTC-Fuses Type PFRX

Cured, flame retardant epoxy
Polymer insulating material
meets UL 94V-0
requirements

Bulk packaging, tape and
reel and Ammo-Pak
available on most models

Agency recognition:
UL, CSA, TÜV

Typical Time to Trip at 23 °C



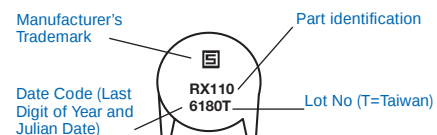
Applications

Almost anywhere there is a low voltage power supply, up to 60 V and a load to be protected, including:

- Security- and Fire alarm systems
- Loud speakers
- Power transformers

Typical Part Marking

Layout may vary



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% typ. resist. change
Humidity Aging	+85 °C, 85% R.H. 1000 hours	±5% typ. resist. change
Thermal Shock *)	+85 °C/-40 °C 10 times	±10% typ. resist. change
Mechanical Shock	MIL-STD-202, Method 213, Condition 1 (100 g, 6 sec.)	No resistance change
Solvent Resistance	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-883C, Method 2007.1, Condition A	No change

*) MIL-STD-202, Method 213

Test Procedures And Requirements For Model PFRX Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech.	Verify dimensions and materials	Per PF physical description
Resistance	In still air @ 23 °C	$R_{min} \leq R \leq R_{max}$
Time to Trip	At specified current V_{max} , 23 °C	$T \leq \text{max. time to trip (sec.)}$
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

FUSES

Resettable fuses

PFRX

Electrical Characteristics

Type	V _{max}	I _{max}	I _{hold}	I _{trip}	Initial Resistance		1 Hour (R1) Post-Trip Resistance	Max. Time to trip at 23 °C	Tripped Power Dissipation
	V	A	Amperes at 23 °C		Ohms at 23 °C		Ohms at 23 °C	Seconds at 23 °C	Watts at 23 °C
			Hold	Trip	min.	max.	R _{1 max.}		
PFRX.110.X	60	40	1.10	2.20	0.15	0.25	0.38	8.2	1.50
PFRX.135.X	60	40	1.35	2.70	0.12	0.19	0.30	9.6	1.70
PFRX.160.X	60	40	1.60	3.20	0.09	0.14	0.22	11.4	1.90
PFRX.185.X	60	40	1.85	3.70	0.08	0.12	0.19	12.6	2.10
PFRX.250	60	40	2.50	5.00	0.05	0.08	0.13	15.6	2.50
PFRX.300	60	40	3.00	6.00	0.04	0.06	0.10	19.8	2.80
PFRX.375	60	40	3.75	7.50	0.03	0.05	0.08	24.0	3.20

Packaging

Bulk
(leave .X space empty)

All types = 500 pcs. per bag

Tape and reel
.X = 2

PFRX.110 – PFRX.160 = 1500 pcs. per reel ;
PFRX.185 = 1000 pcs. per reel

Ammo Pack:
.X = 3

PFRX.110 – PFRX.160 = 1000 pcs. per reel ;
PFRX.185 = 500 pcs. per reel

Dimensions

Type	A	B	C		D	E	Style	Lead	Material
	max.	max.	nom.	Tol. ±	min.	max.			
PFRX.110.X	13.0	18.0	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.135.X	14.5	19.6	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.160.X	16.3	21.3	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.185.X	17.8	22.9	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.250	21.3	26.4	10.2	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.300	24.9	30.0	10.2	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.375	28.4	33.5	10.2	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu

Dimension = mm

Thermal Derating Chart - I_{hold} (Amps)

Type	Ambient Operating Temperature								
	40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
PFRX.110.X	1.71	1.50	1.31	1.10	0.89	0.79	0.69	0.59	0.44
PFRX.135.X	2.09	1.84	1.61	1.35	1.09	0.97	0.85	0.73	0.54
PFRX.160.X	2.48	2.18	1.90	1.60	1.30	1.15	1.01	0.86	0.64
PFRX.185.X	2.87	2.52	2.20	1.85	1.50	1.33	1.17	1.00	0.74
PFRX.250	3.88	3.40	2.98	2.50	2.03	1.80	1.58	1.35	1.00
PFRX.300	4.65	4.08	3.57	3.00	2.43	2.16	1.89	1.62	1.20
PFRX.375	5.81	5.10	4.46	3.75	3.04	2.70	2.36	2.03	1.50

How To Order

PTC-Fuse **PF** **RX . XXX . X**

Style **RX = Radial Leaded Component**

Hold Current, I_{hold}
110-375 (1.10 mA - 3.75 A)

Packaging Options
- = Bulk Packaging
.2 = Tape and Reel*
.3 = Ammo Pack*

*Packaged per E1486-B