

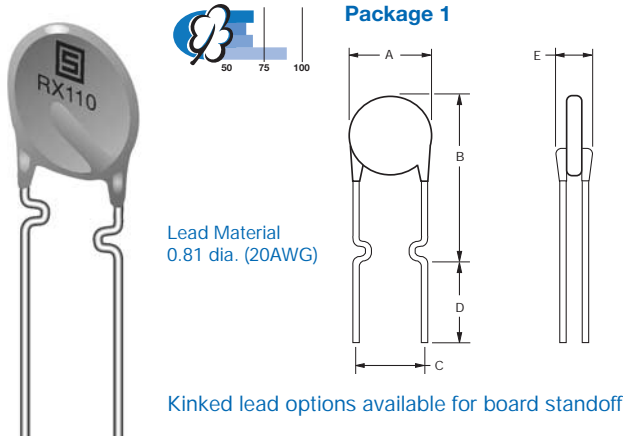
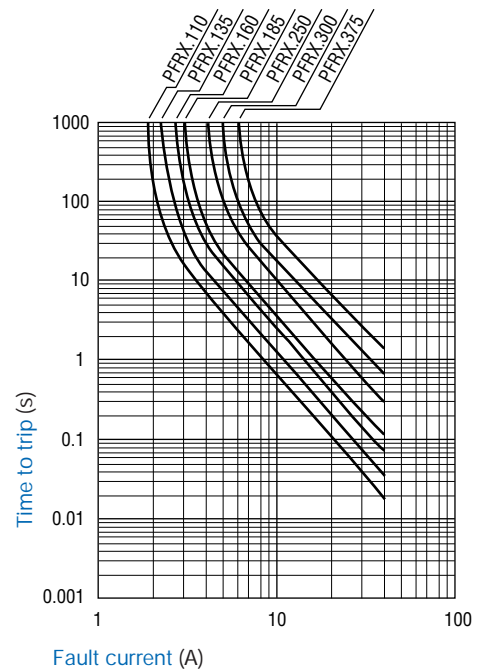
**Wire leaded  
PTC-Fuses  
Type PFRX**

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



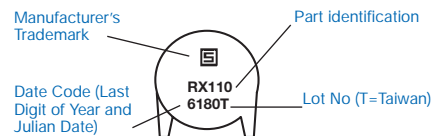
**Applications**

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 <sub>max</sub> V	I <sub>max</sub> A	I <sub>hold</sub>	I <sub>trip</sub>	Initial Resistance		1 Hour (R1) Post-Trip Resistance	Max. Time to trip at 23 °C	Tripped Power Dissipation	
					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 <sub>1 max.</sub>	
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

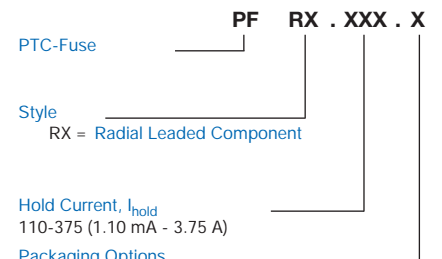
Type	A	B	C		D	E	Style	Lead	Material
	max.	max.	nom.	Tol. ±	min.	max.			
PFRX.110.X	13.0	18.0	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.135.X	14.5	19.6	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.160.X	16.3	21.3	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	Sn/Cu
PFRX.185.X	17.8	22.9	5.1	0.7	7.6	3.1	1	0.81 dia. / Ø	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<sub>hold</sub> (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



\*Packaged per E1486-B