



Features

- Radial Leaded Devices
- High voltage surge capabilities
- Binned and sorted resistance ranges
- Assists in complying with ITU K.20/K.21 specifications
- Withstands lightning power induction
- Agency recognition:



Applications

Used as a secondary overcurrent protection device in:

- Customer Premise Equipment (CPE)
- Central Office (CO)
- Subscriber Line Interface Cards (SLIC)

PFRT Series - Telecom PTC Resettable Fuses

Electrical Characteristics

Model	Max. Operating Voltage Volts	Max. Interrupt Ratings		Hold Current Amps at 23°C	Initial Resistance		One Hour Post-Trip Resistance Ohms at 23°C
		Volts (V)	Amps (A)		Ohms at 23°C	Ohms at 23°C	
		Max.	Max.		Min.	Max.	
* PFRT.008.250.U	60	250	3.0	0.08	14.0	20.0	33.0
* PFRT.008.250	60	250	3.0	0.08	15.0	22.0	33.0
* PFRT.011.250.U	60	250	3.0	0.11	5.0	9.0	16.0
PFRT.012.250	60	250	3.0	0.12	4.0	8.0	16.0
PFRT.012.250.U	60	250	3.0	0.12	6.0	10.0	16.0
* PFRT.014.250	60	250	3.0	0.14	3.0	6.0	12.0
* PFRT.014.250.U	60	250	3.0	0.14	3.5	6.5	12.0
* PFRT.018.250.U	60	250	10.0	0.18	0.8	2.0	4.0

* preliminary

Environmental Characteristics

Operating/Storage Temperature	-45°C to +85°C
Maximum Device Surface Temperature in Tripped State	125°C
Passive Aging	+85°C, 1000 hours±2% typical resistance change +60°C, 1000 hours±3% typical resistance change
Humidity Aging	+85°C, 85% R.H. 500 hours±3% typical resistance change
Thermal Shock	MIL-STD-202F, Method 107G,±10% typical resistance change +125°C to -55°C, 10 times±15% typical resistance change
Solvent Resistance	MIL-STD-202, Method 215BNo change
Lead Solderability	ANSI/J-STD-002
Flammability	IEC 695-2-2No Flame for 60 secs.
Vibration	MIL-STD-883C, Method 2007.1, Condition ANo change

Test Procedures And Requirements For Model PFRT Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech.	Verify dimensions and materials.....	Per MF physical description
Resistance	In still air @ 23°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	.5 times I_{hold} , V_{max} , 23°C	$T \leq \text{max. time to trip (seconds)}$
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	E 174545S*	
CSA File Number	CA 110338	
TÜV File Number	R2057213	

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
* PFRT.008.250	0.124	0.110	0.095	0.080	0.066	0.059	0.051	0.044	0.033
* PFRT.011.250	0.171	0.151	0.131	0.110	0.091	0.081	0.071	0.061	0.046
PFRT.012.250	0.186	0.165	0.143	0.120	0.099	0.088	0.077	0.066	0.050
* PFRT.014.250	0.255	0.199	0.172	0.145	0.119	0.106	0.093	0.080	0.060
* PFRT.018.250	0.269	0.240	0.211	0.180	0.153	0.138	0.123	0.109	0.087

* I_{trip} is approximately two times I_{hold} .

* preliminary

PFRT Series - Telecom PTC Resettable Fuses



Product Dimensions

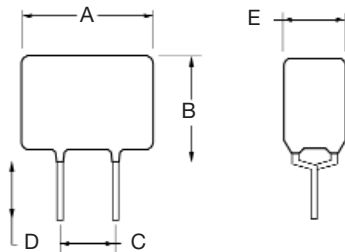
Model	A Max.	B Max.	C Max.	D Nom.	E Nom.	Physical Characteristics		
						Style	Lead Dia.	Material
* PFRT.008.250.U	$\frac{4.8}{(0.189)}$	$\frac{9.1}{(0.358)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu
* PFRT.008.250	$\frac{5.3}{(0.209)}$	$\frac{9.3}{(0.366)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu
* PFRT.011.250.U	$\frac{5.3}{(0.209)}$	$\frac{9.4}{(0.370)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu
PFRT.012.250	$\frac{6.5}{(0.256)}$	$\frac{11.0}{(0.433)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu
PFRT.012.250.U	$\frac{6.0}{(0.236)}$	$\frac{10.0}{(0.394)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu
* PFRT.014.250	$\frac{6.5}{(0.256)}$	$\frac{11.0}{(0.433)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu
* PFRT.014.250.U	$\frac{6.0}{(0.236)}$	$\frac{10.0}{(0.394)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu
* PFRT.018.250.U	$\frac{6.0}{(0.236)}$	$\frac{10.0}{(0.394)}$	$\frac{5.1 \pm 0.7}{(0.201 \pm 0.028)}$	$\frac{4.7}{(0.185)}$	$\frac{5.0}{(0.197)}$	1	$\frac{0.65}{(0.026)}$	Sn/Cu

Packaging options:

BULK: 500 pcs. per bag. TAPE & REEL: 3000 pcs. per reel.

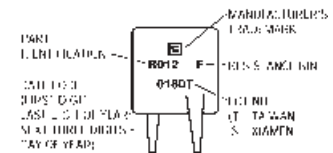
MM
DIMENSIONS = (INCHES)

* preliminary

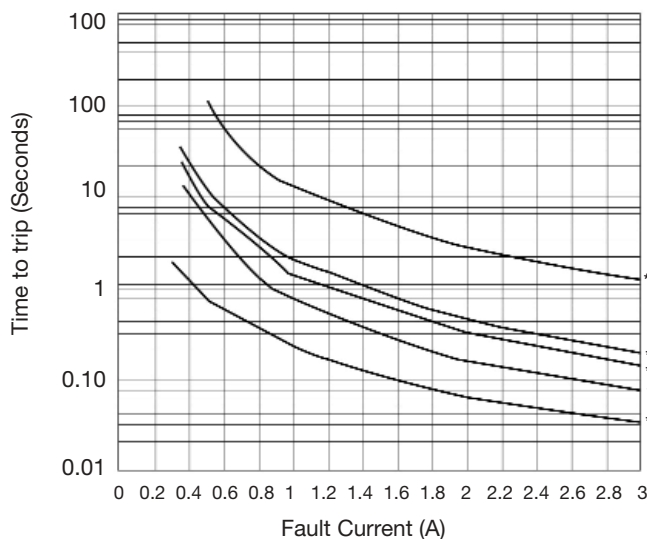


Typical Part Marking

Represents total content. Layout may vary.



Typical Time to Trip at 23°C



How to Order

PF	RT	.xxx	.250	.x	.x	.x
PTC-Fuse						
Series	RT = Radial Leaded Telecom Component					
Hold Current, I _{hold}	008-018 (0.08-018 Amps)					
Max. Interrupt Voltage	250 (250V)					
Resistance Sorted	E = 7-12 Ω F = 6-10 Ω G = 6-9 Ω H = 8-10.5 Ω					
.B = Bare Disc						
.U = Uncoated Parts						
- = Bulk Packaging						
.2 = Tape & Reel						

NOTE: All parts are also available "binned". All parts within a package will be within 0.5Ω of each other within the initial resistance range.