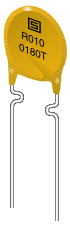
Radial Leaded Fuse, PTC, 60 VDC



16.0 - 60.0 VDC · 0.1 - 11 A

Description
- THT standard industry type
- Directly solderable on printed circuit boards

Standards
- UL 1434
- CSA C22.2 no. 0, TIL no. CA-3A

Approvals
- UL File Number: E172175
- CSA File Number: 702083

Applications
- Computer & Peripherals
- General electronics
- Automotive applications

References
Packaging Details

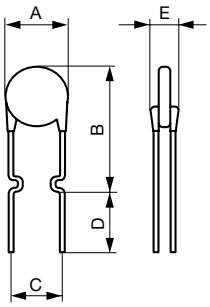
Weblinks
pdf-datasheet, html-datasheet, General Product Information, Approvals, CE declaration of conformity, RoHS, CHINA-RoHS, REACH, e-Shop, SCHURTER-Stock-Check, Distributor-Stock-Check, Detailed request for product

Technical Data

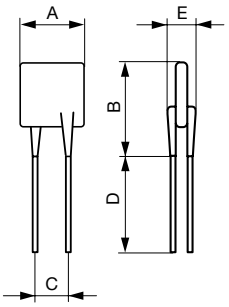
V max	16.0 - 60.0 VDC
Imax	40 - 100 A
I hold	0.1 - 11 A
Mounting	PCB,THT
Allowable Operation Temp.	-40 °C to 85 °C
Material: Terminals	see variants
Weight	0.35 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	, Type, I hold

Soldering Methods	Wave
Solderability	235 °C / 2 sec
Resistance to Soldering Heat	260 °C / 10 sec
Passing Aging	+85 °C, 1000 Hours -> +/- 5% Typical Resistance Change
Humidity Aging	+85 °C, 85% r.h., 1000 Hours -> +/- 5% Typical Resistance Change
Thermal Shock	MIL-STD-202, Method 107 (+125 °C to -55 °C, 10 Cycles) -> +/- 15% Typical Resistance Change
Vibration	MIL-STD-883C, Method 2007.1, Test Condition A
Resistance to Solvents	MIL-STD-202, Methode 215
Flammability	UL 94V-0

Dimension

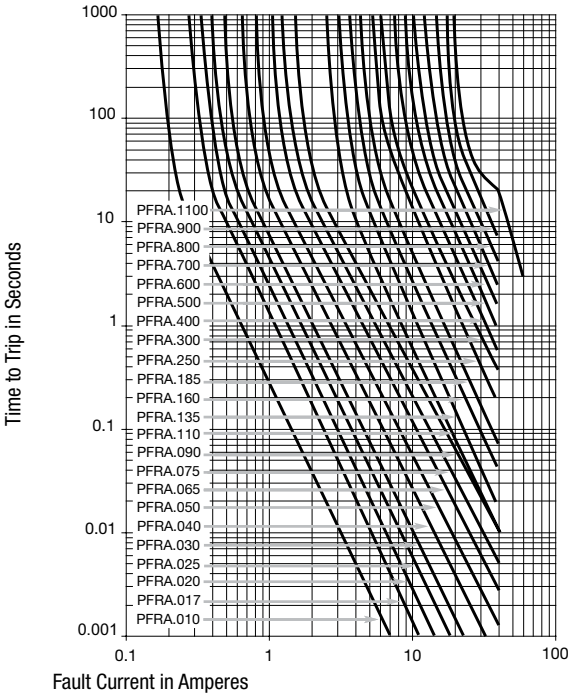


PFRA.010 - PFRA.185



PFRA.250 - PFRA.1100

Time-Current-Curves



Dimensions

A max [mm]	Insert depth	C min [mm]	C max [mm]	D min [mm]	E max [mm]	Ø Lead [mm]	Terminal	Order Number	
7.4	12.7	4.4	5.8	7.6	3.1	0.51	Tin-Pated NiCu	PFRA.010	▮
7.4	12.7	4.4	5.8	7.6	3.1	0.51	Tin-Plated CuFe	PFRA.017	▮
7.4	12.7	4.4	5.8	7.6	3.1	0.51	Tin-Plated CuFe	PFRA.020	▮
7.4	12.7	4.4	5.8	7.6	3.1	0.51	Tin-Plated CuFe	PFRA.025	▮
7.4	13.4	4.4	5.8	7.6	3.1	0.51	Tin-Plated CuFe	PFRA.030	▮
7.4	13.7	4.4	5.8	7.6	3.1	0.51	Tin-Plated CuFe	PFRA.040	▮
7.9	13.7	4.4	5.8	7.6	3.1	0.51	see variants	PFRA.050	▮
9.7	15.2	4.4	5.8	7.6	3.1	0.51	see variants	PFRA.065	▮
10.4	16	4.4	5.8	7.6	3.1	0.51	see variants	PFRA.075	▮
11.7	16.7	4.4	5.8	7.6	3.1	0.51	see variants	PFRA.090	▮
8.9	14	4.4	5.8	7.6	3	0.51	see variants	PFRA.110	▮
8.9	18.9	4.4	5.8	7.6	3	0.51	see variants	PFRA.135	▮
10.2	16.8	4.4	5.8	7.6	3	0.51	see variants	PFRA.160	▮
12	18.4	4.4	5.8	7.6	3	0.51	see variants	PFRA.185	▮
12	18.3	4.4	5.8	7.6	3	0.81	see variants	PFRA.250	▮
12	18.3	4.4	5.8	7.6	3	0.81	see variants	PFRA.300	▮
14.4	24.8	4.4	5.8	7.6	3	0.81	see variants	PFRA.400	▮
17.4	24.9	9.5	10.9	7.6	3	0.81	see variants	PFRA.500	▮
19.3	31.9	9.5	10.9	7.6	3	0.81	see variants	PFRA.600	
22.1	29.8	9.5	10.9	7.6	3	0.81	see variants	PFRA.700	
24.2	32.9	9.5	10.9	7.6	3	0.81	see variants	PFRA.800	▮
24.2	32.9	9.5	10.9	7.6	3	0.81	see variants	PFRA.900	
24.2	32.9	9.5	10.9	7.6	3	0.81	see variants	PFRA.1100	

▮ Most Popular.

Availability for all products can be searched real-time:http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

Thermal Derating Chart Ihold [A]

-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C	Order Number	
0.16	0.14	0.12	0.1	0.08	0.07	0.06	0.05	0.04	PFRA.010	■
0.26	0.23	0.2	0.17	0.14	0.12	0.11	0.09	0.07	PFRA.017	■
0.31	0.27	0.24	0.2	0.16	0.14	0.13	0.11	0.08	PFRA.020	■
0.39	0.34	0.3	0.25	0.2	0.18	0.16	0.14	0.1	PFRA.025	■
0.47	0.41	0.36	0.3	0.24	0.22	0.19	0.16	0.12	PFRA.030	■
0.62	0.54	0.48	0.4	0.32	0.29	0.25	0.22	0.16	PFRA.040	■
0.78	0.68	0.6	0.5	0.41	0.36	0.32	0.27	0.2	PFRA.050	■
1.01	0.88	0.77	0.65	0.53	0.47	0.41	0.35	0.26	PFRA.065	■
1.16	1.02	0.89	0.75	0.61	0.54	0.47	0.41	0.3	PFRA.075	■
1.4	1.22	1.07	0.9	0.73	0.65	0.57	0.49	0.36	PFRA.090	■
1.6	1.43	1.27	1.1	0.91	0.85	0.75	0.67	0.57	PFRA.110	■
1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.7	PFRA.135	■
2.32	2.08	1.84	1.6	1.33	1.32	1.09	0.98	0.83	PFRA.160	■
2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96	PFRA.185	■
3.63	3.25	2.88	2.5	2.08	1.93	1.7	1.53	1.3	PFRA.250	■
4.35	3.9	3.45	3	2.49	2.31	2.04	1.83	1.56	PFRA.300	■
5.8	5.2	4.6	4	3.32	3.08	2.72	2.44	2.08	PFRA.400	■
7.25	6.5	5.75	5	4.15	3.85	3.4	3.05	2.6	PFRA.500	■
8.7	7.8	6.9	6	4.98	4.62	4.08	3.66	3.12	PFRA.600	
10.1	9.1	8.05	7	5.81	5.39	4.76	4.27	3.64	PFRA.700	
11.6	10.4	9.2	8	6.64	6.16	5.44	4.88	4.16	PFRA.800	■
13	11.7	10.3	9	7.47	6.93	6.12	5.49	4.68	PFRA.900	
16.1	14.6	13.1	11	9.4	8.8	7.8	6.9	5.2	PFRA.1100	

■ Most Popular.

Availability for all products can be searched real-time:http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

Electrical Characteristics at 23 °C

V max [VDC]	I max [A]	I hold [A]	I trip [A]	R initial min [Ω]	R initial max [Ω]	R 1hour max [Ω]	Max Time to trip [A]	Max Time to Trip [s]	Tripped Power Dissipation [W]	Order Number	
60.0	40	0.1	0.2	2.5	4.5	7.5	0.5	4	0.38	PFRA.010	■
60.0	40	0.17	0.34	2	3.2	8	0.85	3	0.48	PFRA.017	■
60.0	40	0.2	0.4	1.5	2.84	4.4	1	2.2	0.40	PFRA.020	■
60.0	40	0.25	0.5	1	1.95	3	1.25	2.5	0.45	PFRA.025	■
60.0	40	0.3	0.6	0.76	1.36	2.1	1.5	3	0.50	PFRA.030	■
60.0	40	0.4	0.8	0.52	0.86	1.29	2	3.8	0.55	PFRA.040	■
60.0	40	0.5	1	0.41	0.77	1.17	2.5	4	0.75	PFRA.050	■
60.0	40	0.65	1.3	0.27	0.48	0.72	3.25	5.3	0.90	PFRA.065	■
60.0	40	0.75	1.5	0.18	0.4	0.6	3.75	6.3	0.90	PFRA.075	■
60.0	40	0.9	1.8	0.14	0.31	0.47	4.5	7.2	1.00	PFRA.090	■
30.0	40	1.1	2.2	0.1	0.18	0.27	5.5	6.6	0.70	PFRA.110	■
30.0	40	1.35	2.7	0.065	0.115	0.17	6.75	7.3	0.80	PFRA.135	■
30.0	40	1.6	3.2	0.055	0.105	0.15	8	8	0.90	PFRA.160	■
30.0	40	1.85	3.7	0.04	0.07	0.11	9.25	8.7	1.00	PFRA.185	■
30.0	40	2.5	5	0.025	0.048	0.07	12.5	10.3	1.20	PFRA.250	■
30.0	40	3	6	0.02	0.05	0.08	15	10.8	2.00	PFRA.300	■
30.0	40	4	8	0.01	0.03	0.05	20	12.7	2.50	PFRA.400	■
30.0	40	5	10	0.01	0.03	0.05	25	14.5	3.00	PFRA.500	■
30.0	40	6	12	0.005	0.02	0.04	30	16	3.50	PFRA.600	
30.0	40	7	14	0.005	0.02	0.03	35	17.5	3.80	PFRA.700	
30.0	40	8	16	0.005	0.02	0.03	40	18.8	4.00	PFRA.800	■
30.0	40	9	18	0.005	0.01	0.02	45	20	4.20	PFRA.900	
16.0	100	11	22	0.003	0.01	0.01	40	20	4.50	PFRA.1100	

■ Most Popular.

Availability for all products can be searched real-time:http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

Packaging Unit	PFRA.xxxx	Bulk (500 pcs.)
	PFRA.010.2 - PFRA.160.2	Taped 34 cm Reel (3000 pcs.)
	PFRA.185.2 - PFRA.400.2	Taped 34 cm Reel (1500 pcs.)

26.03.2015

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.