Radial Leaded Fuse, PPTC, 30 VDC

Style 1

Style 2

Style 3

30 VDC · 0.9 - 9 A

See below:
Approvals and Compliances

Description
- Radial Leaded Devices
- Cured, flame retardant epoxy polymer insulating material meets UL 94V-0 requirements
- Resettable polymer PTC thermistors for high reliability overcurrent protection

Unique Selling Proposition
- Multiple sizes and shapes are available
- Lead shape and length can be customized
- Full range coverage of current ratings
- Compatible with high-volume electronics assembly processes

Applications
- Energy storage systems
- Power supply
- Household appliances
- Power tools
- Lithium-Ionen-Batterien
- Entertainment Equipment

Weblinks
pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product

Technical Data

V max	30 VDC
Imax	40 - 100 A
I hold	0.9 - 9 A
Attachment	PCB,THT
Allowable Operation Temperature	-40 °C to 85 °C
Material: Terminals	see variants
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	, V max code, I hold, Lot no.

Soldering Methods	Wave Soldering Profile
Solderability	245 °C / 5 sec
Resistance to Soldering Heat	265 °C / 5 sec
Passing Aging	+85 °C, 1000 hours, Rmin < R < R1max
Humidity Aging	+85 °C, 85% r.h., 1000 hours, Rmin < R < R1max
Thermal Shock	30 min@-40 °C ~ 30 min@85 °C, 10 cycles, Rmin < R < R1max
Resistance to Solvents	MIL-STD-202, Method 215

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: PFTB

Approval Logo	Certificates	Certification Body	Description
c US	UL Approvals	UL	UR File Number: E553873

Product standards

Product standards that are referenced

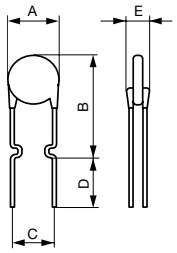
Organization	Design	Standard	Description
UL	Designed according to	UL 248-14	Low voltage fuses - Part 14: Supplemental fuses
CSA Group	Designed according to	CSA22.2 No. 248.14	Low-Voltage Fuses - Part 14: Supplemental Fuses

Compliances

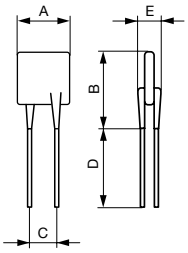
The product complies with following Guide Lines

Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
RoHS COMPLIANT	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
Halogen Free HF	Halogen Free	SCHURTER AG	SCHURTER strives to offer our customers halogen free products.
REACH	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

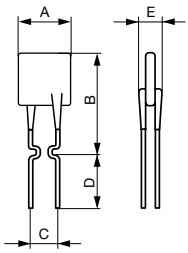
Dimension [mm]



Style 1

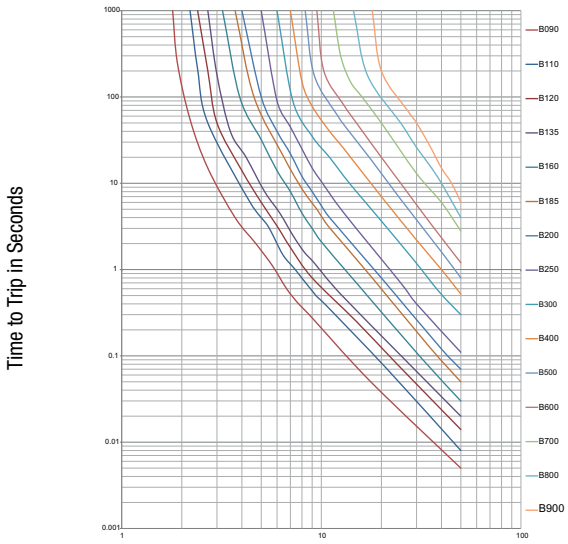


Style 2



Style 3

Time-Current-Curves



Fault Current in Amperes

Dimensions

A max [mm]	B max [mm]	C typ. [mm]	D min [mm]	E max [mm]	Style	Ø Lead [mm]	Material: Terminals	Packaging unit [PCS]	Order Number
7.4	14	5.1	7.6	3.1	3	0.5	Tin-Plated CCS	1000	3-161-311
7.4	14	5.1	17.5	3.1	3	0.5	Tin-Plated CCS	2000	3-161-312
10.7	16.7	5.1	7.6	3.1	1	0.5	Tin-Plated CCS	1000	3-161-313
10.7	16.7	5.1	17.5	3.1	1	0.5	Tin-Plated CCS	2000	3-161-314
10.7	16.7	5.1	7.6	3.1	1	0.5	Tin-Plated CCS	1000	3-161-315
10.7	16.7	5.1	17.5	3.1	1	0.5	Tin-Plated CCS	2000	3-161-316
10.7	16.7	5.1	7.6	3.1	1	0.5	Tin-Plated CCS	1000	3-161-317
10.7	16.7	5.1	17.5	3.1	1	0.5	Tin-Plated CCS	2000	3-161-318
11	16.8	5.1	7.6	3.1	1	0.6	Tin-Plated Copper	1000	3-161-319
11	16.8	5.1	17.5	3.1	1	0.6	Tin-Plated Copper	2000	3-161-320
11.5	17.9	5.1	7.6	3.1	1	0.6	Tin-Plated Copper	1000	3-161-321
11.5	17.9	5.1	17.5	3.1	1	0.6	Tin-Plated Copper	2000	3-161-322
13	18.3	5.1	7.6	3.1	3	0.6	Tin-Plated Copper	1000	3-161-323
13	18.3	5.1	17.5	3.1	3	0.6	Tin-Plated Copper	2000	3-161-324
13	18.3	5.1	7.6	3.1	2	0.6	Tin-Plated Copper	500	3-161-325
13	18.3	5.1	17.5	3.1	2	0.6	Tin-Plated Copper	2000	3-161-326
13	18.3	5.1	7.6	3.1	2	0.8	Tin-Plated Copper	500	3-161-327
13	18.3	5.1	17.5	3.1	2	0.8	Tin-Plated Copper	2000	3-161-328
16.4	24.8	5.1	7.6	3.1	2	0.8	Tin-Plated Copper	500	3-161-329
21.3	26.4	10.2	7.6	3.1	2	0.8	Tin-Plated Copper	200	3-161-330
20.8	29.8	10.2	7.6	3.1	2	0.8	Tin-Plated Copper	200	3-161-331
20.8	29.8	10.2	7.6	3.1	2	0.8	Tin-Plated Copper	200	3-161-332
24.2	32.9	10.2	7.6	3.1	2	0.8	Tin-Plated Copper	200	3-161-333
24.2	32.9	10.2	7.6	3.1	2	0.8	Tin-Plated Copper	200	3-161-334

Availability for all products can be searched real-time: https://www.schurter.com/en/info-center/support-tools/stock-check-distributors

Thermal Derating Chart Ihold [A]

-40 °C	-20 °C	0 °C	25 °C	40 °C	50 °C	60 °C	70 °C	85 °C	Order Number
1.4	1.22	1.07	0.9	0.73	0.65	0.57	0.49	0.36	3-161-311
1.4	1.22	1.07	0.9	0.73	0.65	0.57	0.49	0.36	3-161-312
1.6	1.43	1.27	1.1	0.91	0.85	0.75	0.67	0.57	3-161-313
1.6	1.43	1.27	1.1	0.91	0.85	0.75	0.67	0.57	3-161-314
1.75	1.56	1.39	1.2	0.99	0.93	0.82	0.73	0.62	3-161-315
1.75	1.56	1.39	1.2	0.99	0.93	0.82	0.73	0.62	3-161-316
1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.7	3-161-317
1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.7	3-161-318
2.32	2.08	1.84	1.6	1.33	1.23	1.09	0.98	0.83	3-161-319
2.32	2.08	1.84	1.6	1.33	1.23	1.09	0.98	0.83	3-161-320
2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96	3-161-321
2.68	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96	3-161-322
2.9	2.6	2.3	2	1.65	1.55	1.4	1.2	1	3-161-323
2.9	2.6	2.3	2	1.65	1.55	1.4	1.2	1	3-161-324
3.63	3.25	2.88	2.5	2.08	1.93	1.7	1.53	1.3	3-161-325
3.63	3.25	2.88	2.5	2.08	1.93	1.7	1.53	1.3	3-161-326
4.35	3.9	3.45	3	2.49	2.31	2.04	1.83	1.56	3-161-327
4.35	3.9	3.45	3	2.49	2.31	2.04	1.83	1.56	3-161-328
5.8	5.2	4.6	4	3.32	3.08	2.72	2.44	2.08	3-161-329
7.25	6.5	5.75	5	4.15	3.85	3.4	3.05	2.6	3-161-330
8.7	7.8	6.9	6	4.98	4.62	4.08	3.66	3.12	3-161-331
10.1	9.1	8.05	7	5.81	5.39	4.76	4.27	3.64	3-161-332
11.6	10.4	9.2	8	6.64	6.16	5.44	4.88	4.16	3-161-333
13	11.7	10.3	9	7.47	6.93	6.12	5.49	4.68	3-161-334

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Electrical Characteristics at 25 °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
30	40	0.9	1.8	0.09	0.23	0.3	4.5	5.9	0.60	3-161-311
30	40	0.9	1.8	0.09	0.23	0.3	4.5	5.9	0.60	3-161-312
30	40	1.1	2.2	0.06	0.16	0.26	5.5	6.6	0.70	3-161-313
30	40	1.1	2.2	0.06	0.16	0.26	5.5	6.6	0.70	3-161-314
30	40	1.2	2.4	0.05	0.115	0.255	6	6.5	0.70	3-161-315
30	40	1.2	2.4	0.05	0.115	0.255	6	6.5	0.70	3-161-316
30	40	1.35	2.7	0.04	0.095	0.17	6.75	7.3	0.80	3-161-317
30	40	1.35	2.7	0.04	0.095	0.17	6.75	7.3	0.80	3-161-318
30	40	1.6	3.2	0.03	0.095	0.16	8	8	0.90	3-161-319
30	40	1.6	3.2	0.03	0.095	0.16	8	8	0.90	3-161-320
30	40	1.85	3.7	0.03	0.07	0.11	9.25	8.7	1.00	3-161-321
30	40	1.85	3.7	0.03	0.07	0.11	9.25	8.7	1.00	3-161-322
30	40	2	4	0.02	0.05	0.11	10	8.7	1.00	3-161-323
30	40	2	4	0.02	0.05	0.11	10	8.7	1.00	3-161-324
30	40	2.5	5	0.02	0.048	0.072	12.5	10.3	1.20	3-161-325
30	40	2.5	5	0.02	0.048	0.072	12.5	10.3	1.20	3-161-326
30	40	3	6	0.015	0.05	0.075	15	10.8	2.00	3-161-327
30	40	3	6	0.015	0.05	0.075	15	10.8	2.00	3-161-328
30	40	4	8	0.01	0.03	0.045	20	12.7	2.50	3-161-329
30	100	5	10	0.008	0.025	0.045	25	14.5	3.00	3-161-330
30	100	6	12	0.005	0.02	0.03	30	16	3.50	3-161-331
30	100	7	14	0.003	0.016	0.025	35	17.5	3.80	3-161-332
30	100	8	16	0.004	0.015	0.023	40	18.8	4.00	3-161-333
30	100	9	18	0.004	0.01	0.015	40	20	4.00	3-161-334

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

V max: Maximum voltage device can withstand without damage at rated current.
I max: Maximum fault current device can withstand without damage at rated voltage.
I hold: Holding Current: maximum current at which the device will not trip in 25 °C still air.
I trip: Tripping Current minimum current at which the device will trip in 25 °C still air.
R initial min: Minimum resistance of device prior to trip at 25 °C.
R initial max: Maximum resistance of device prior to trip at 25 °C.
R 1hour max: Maximum resistance of device measured one hour after tripping at 25 °C.
T trip: Maximum time to trip(s) at assigned current.
Pd typ: Rated working power.

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Packaging Unit	200 St. in ESD-plastic bag 500 St. in ESD-plastic bag 1000 St. in ESD-plastic bag 2000 pcs. in tape on reel

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