Surface Mount Fuse, 2410, Quick-Acting F, 125 - 250 VAC, 86 - 125 VDC

new



UL 248-14 · 125 - 250 VAC · 86 - 125 VDC · Quick-Acting F

See below:
Approvals and Compliances

Description

- Innovative melting wire fuse without internal solder joint, lead-free, and tested according to internal AEC-Q200 qualification. The fuse is sealed against potting compounds

Unique Selling Proposition

- Small size (2410 footprint) for 125 VDC and up to 250 VAC rating
- High range of operating temperature (-55°C to 125°C)
- Precision acting

Applications

- Battery driven applications
- Lighting: Ballast, LED drivers
- Medical and industrial equipment
- Power supply
- White goods

Weblinks

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

Technical Data

Rated Voltage	125 - 250 VAC, 86 - 125 VDC
Rated current	0.63 - 10 A
Breaking Capacity	50 A - 200 A
Characteristic	Quick-Acting F
Mounting	PCB,SMT
Admissible Ambient Temp.	-55 °C to 125 °C
Material: Housing	Fiber-reinforced plastic, UL 94V-0
Material: Terminals	Copper, Ni/Au-plated
Unit Weight	0.06 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	Letter (see variants)

Soldering Methods	Reflow Soldering Profile
Solderability	JESD22-B102E, Method 1
Resistance to Soldering Heat	JEDEC J-STD-020
Flammability	UL 94V-1
Moisture Sensitivity Level	MSL1, J-STD-020
Operational Time	AEC-Q200-004 MIL-STD-202, Method 108 Condition D
External Visual	MIL-STD-883 Method 2009
Physical Dimension	JESD22 Method JB-100
Load Humidity Test	MIL-STD-202, Method 103
Vibration, High Frequency	MIL-STD-202, Method 204
Mechanical Shock	MIL-STD-202, Method 213 Condition C
High Temperature Exposure	MIL-STD-202, Method 108
Resistance to Solvents	MIL-STD-202, Method 215
Temperature Cycling	JESD22 Method JA-104
Board Flex	AEC-Q200-005
Terminal Strength	AEC-Q200-006

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: USE 2410

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40062227
	UL Approvals	UL	UR File Number: E41599

Product standards

Product standards that are referenced

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

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

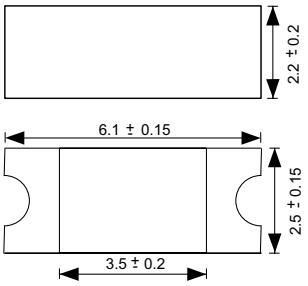
Compliances

The product complies with following Guide Lines

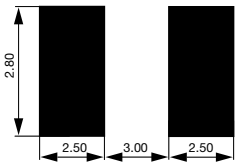
Identification	Details	Initiator	Description
	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	RoHS	SCHURTER AG	
	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.
	Automotive	SCHURTER AG	AEC-Q200 is a test standard for passive components used in automotive applications. SCHURTER tests components according to the customer's agreement and is certified according to IATF 16949.

Dimension [mm]

6.1 mm

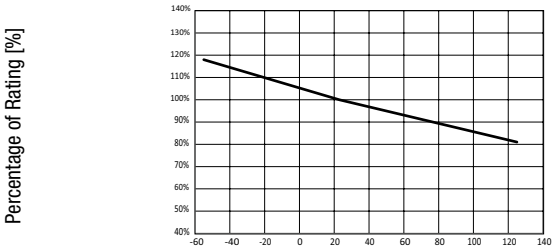


Soldering pads



Derating Curves

Temperature Derating

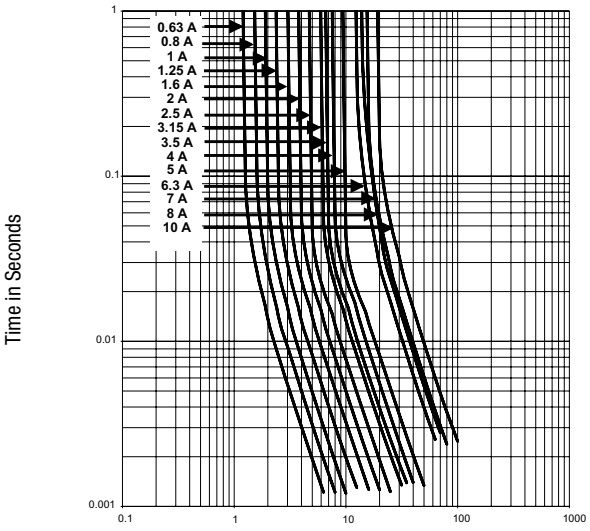


Ambient Temperature [°C]
Additional derating of 25% for continuous operation

Pre-Arcing Time

Rated Current In	1.0 x In min.	2.0 x In max.	4.0 x In max.	10.0 x In max.
0.63 A - 10 A	4 h	5 s	50 ms	10 ms

Time-Current-Curves



Current in Amperes

Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Marking	Breaking Capacity	Voltage Drop 1.0 $x I_n$ typ. [mV]	Cold Resistance typ. [mΩ]	Melting I^2t 10.0 I_n typ. [A^2s]	cULus	VDE	Packaging unit [PCS]	Order Number
0.63	250	125	FD	1)3)5)	104	132	0.045	●	●	2800	3-148-689
0.8	250	125	FE	1)3)5)	107	103	0.083	●	●	2800	3-148-691
1.0	250	125	FF	1)3)5)	101	79	0.15	●	●	2800	3-148-693
1.25	250	125	FG	1)3)5)	105	62	0.22	●	●	2800	3-148-695
1.6	250	125	FH	1)3)5)	112	51	0.35	●		2800	3-148-697
2.0	125	125	FI	2)3)5)	114	39	0.56	●		2800	3-148-699
2.5	125	125	FJ	2)3)5)	116	32	0.86	●		2800	3-148-701

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Marking	Breaking Capacity	Voltage Drop 1.0 xI_n typ. [mV]	Cold Resistance typ. [mΩ]	Melting I^2t 10.0 I_n typ. [A^2s]	cULus VDE	Packaging unit [PCS]	Order Number
3.15	125	125	FK	2)3)5)	122	26	1.31	●	2800	3-148-703
3.5	125	125	FL	2)3)5)	128	23	1.59	●	2800	3-148-705
4.0	125	125	FM	2)3)5)	125	20	2.33	●	2800	3-146-549
5.0	125	125	FN	2)3)5)	139	16	3.3	●	2800	3-148-707
6.3	-	125	FO	4)5)	76	9	10.1	●	2800	3-148-709
7.0	-	125	FP	4)5)	76	8	13.7	●	2800	3-148-711
8.0	-	125	FQ	4)5)	84	8	15.3	●	2800	3-148-713
10.0	-	125	FR	4)	86	6	26.9	●	2800	3-148-715

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

1) UL & IEC: 100 A @ 250 VAC, cos φ > 0.998

2) UL: 100 A @ 125 VAC, cos φ > 0.998

3) UL: 100 A @ 125 VDC, tau < 0.05 ms

4) UL: 50 A @ 125 VDC, tau < 0.05 ms

5) UL: 200 A @ 86 VDC , tau < 0.05 ms

All measurements are carried out on a test board according to IEC 60127 with the following tracks:

0.63 - 5.00 A -> Track width 5 mm, Cu layer 35 µm

6.30 - 10.00 A -> Track width 7.5 mm, Cu layer 70 µm

Packaging Unit acc. IEC 60286-3 Type 2a	-	2800 pcs. in tape [W: 12 mm and P1: 8 mm] on reel [A: 33 cm] in ESD-plastic bag

03.11.2026

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.