Solid State, Thin Film, SMD 1206, Super-Quick-Acting FF, 125 VAC, 125 VDC, 150 °C

new



UL 248-14 · 125 VAC · 125 VDC · Super-Quick-Acting FF

See below:
Approvals and Compliances

Description
- Highest Breaking Capacity Rating for a 1206 on the market: 300A@125VDC

Unique Selling Proposition
- No tin whiskers, no tin dendrites
- No leaded coating (RoHS conform)
- Similar fuse qualification as in MIL-PRF 23419
- Hermetically sealed and robust construction

Applications
- Industrial grade space application
- Avionics
- Medical equipment
- Defense

Other versions on request
- Different Up Screenings
- Extensive Test Reports
- Visual Inspection according MIL-PRF 55342

References
Packaging Details

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

Technical Data

Rated Voltage	32 - 125 VAC, 125 VDC
Rated current	0.2 - 5 A
Breaking Capacity	50 A
Characteristic	Super-Quick-Acting FF
Mounting	PCB,SMT
Max. Non-Operating Temp.	+150 °C
Admissible Ambient Air Temp.	-55 °C to 125 °C
Climatic Category	55/125/56 acc. to IEC 60068-1
Material: Housing	Ceramics
Material: Terminals	Tin-Plated Nickel
Unit Weight	0.03 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	none

Soldering Methods	Reflow, Wave Soldering Profile
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58, Test Td
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-58 Test TD, Level 1
Moisture Sensitivity Level	MSL 1, J-STD-020
Damp heat, steady state	IEC 60068-2-78 (40 °C, 93% RH, 56 days)
Thermal Shock	IEC 60068-2-14 (200 air-to-air cycles from -55 to +150°C)
Operational Life	2000h @ 0.63 x In @ 125°C
Load Humidity Test	MIL-STD-202, Method 103B 0.1 x In @ 0.85 r.H. @ 85°C
Moisture Resistance Test	MIL-STD-202, Method 106E (50 cycles in a temp./mister chamber)
Vibration, High Frequency	IEC 60068-2-6 Shock 20 g, 20 min, 10-2000 Hz, 12 cyc.
Mechanical Shock	IEC 60068-2-27 (12 shocks, 1600 g, 0.5 ms)
ESD classification	JEDEC JS-001-2014, Class 1B (500 to < 1000 V)
Resistance to Solvents	Cleaning with common solvents
Terminal Strength	EIA/IS-722, Test 4.5.5 (Deflection of board 1 mm for 1 minute)

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: MGA-A

Approval Logo	Certificates	Certification Body	Description
c UL us	UL Approvals	UL	UL File Number: E41599

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
UL	Designed according to	UL 248-14	Low voltage fuses - Part 14: Additional fuses
CSA Group	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
IEC	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

Compliances

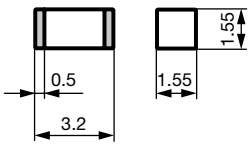
The product complies with following Guide Lines

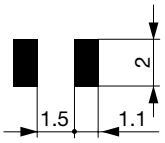
Identification	Details	Initiator	Description
RoHS COMPLIANT	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/836
50	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
REACH	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

Dimension [mm]

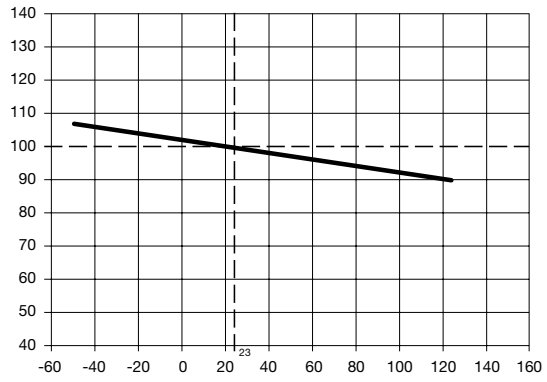
3.2 mm

Reflow soldering pads





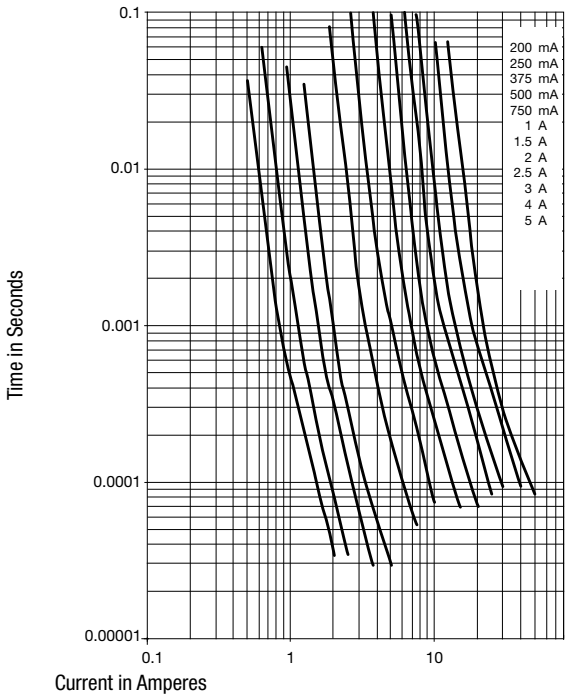
Derating Curves



Pre-Arcing Time

Rated Current In	1.0 x In min.	2.5 x In max.
0.2 A - 5 A	4 h	5 s

Time-Current-Curves



All Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 I_n typ. [mV]	Melting I^2t 10.0 I_n typ. [A^2s]	cULus	Packaging [PCS]	Order Number
0.2	125	125	1)	220	0.0001	●	100	3-103-085
0.2	125	125	1)	220	0.0001	●	750	3-103-086
0.2	125	125	1)	220	0.0001	●	3000	3-103-087
0.2	125	125	1)	220	0.0001	●	10000	3-103-088
0.25	125	125	1)	200	0.00013	●	100	3-103-089
0.25	125	125	1)	200	0.00013	●	750	3-103-090
0.25	125	125	1)	200	0.00013	●	3000	3-103-091
0.25	125	125	1)	200	0.00013	●	10000	3-103-092
0.375	125	125	1)	150	0.00024	●	100	3-103-093

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 I_n typ. [mV]	Melting I^2t 10.0 I_n typ. [A^2s]	c UL us	Packaging [PCS]	Order Number	
0.375	125	125	1)	150	0.00024	●	750	3-103-094	
0.375	125	125	1)	150	0.00024	●	3000	3-103-095	
0.375	125	125	1)	150	0.00024	●	10000	3-103-096	
0.5	125	125	1)	135	0.0004	●	100	3-103-097	▮
0.5	125	125	1)	135	0.0004	●	750	3-103-098	
0.5	125	125	1)	135	0.0004	●	3000	3-103-099	
0.5	125	125	1)	135	0.0004	●	10000	3-103-100	
0.75	125	125	1)	95	0.0011	●	100	3-103-101	▮
0.75	125	125	1)	95	0.0011	●	750	3-103-102	
0.75	125	125	1)	95	0.0011	●	3000	3-103-103	
0.75	125	125	1)	95	0.0011	●	10000	3-103-104	
1	125	125	1)	105	0.0048	●	100	3-103-105	▮
1	125	125	1)	105	0.0048	●	750	3-103-106	
1	125	125	1)	105	0.0048	●	3000	3-103-107	
1	125	125	1)	105	0.0048	●	10000	3-103-108	
1.5	125	125	1)	95	0.011	●	100	3-103-109	▮
1.5	125	125	1)	95	0.011	●	750	3-103-110	
1.5	125	125	1)	95	0.011	●	3000	3-103-111	
1.5	125	125	1)	95	0.011	●	10000	3-103-112	
2	125	125	1)	95	0.019	●	100	3-103-113	▮
2	125	125	1)	95	0.019	●	750	3-103-114	
2	125	125	1)	95	0.019	●	3000	3-103-115	
2	125	125	1)	95	0.019	●	10000	3-103-116	
2.5	125	125	1)	90	0.03	●	100	3-103-117	▮
2.5	125	125	1)	90	0.03	●	750	3-103-118	
2.5	125	125	1)	90	0.03	●	3000	3-103-119	
2.5	125	125	1)	90	0.03	●	10000	3-103-120	
3	125	125	1)	90	0.043	●	100	3-103-121	▮
3	125	125	1)	90	0.043	●	750	3-103-122	
3	125	125	1)	90	0.043	●	3000	3-103-123	
3	125	125	1)	90	0.043	●	10000	3-103-124	
4	63	125	2)	80	0.09	●	100	3-103-125	▮
4	63	125	2)	80	0.09	●	750	3-103-126	
4	63	125	2)	80	0.09	●	3000	3-103-127	
4	63	125	2)	80	0.09	●	10000	3-103-128	
5	32	125	3)	80	0.14	●	100	3-103-129	▮
5	32	125	3)	80	0.14	●	750	3-103-130	
5	32	125	3)	80	0.14	●	3000	3-103-131	
5	32	125	3)	80	0.14	●	10000	3-103-132	

▮ Most Popular.

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

1) 50 A @ 125 VAC / 300 A @ 125 VDC

2) 50 A @ 63 VAC / 50 A @ 125 VDC / 300 A @ 32 VDC

3) 50 A @ 32 VAC / 50 A @ 125 VDC / 300 A @ 32 VDC

Packaging Unit

Taped in plastic bag (100 pcs.)
Blister Tape 18 cm Reel (750 pcs.)
Blister Tape 33 cm Reel (3000 pcs.)
Blister Tape 33 cm Reel (10000 pcs.)

13.06.2019

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.