Solid State, Thin Film, SMD 1206 Fuse for Space Application, ESCC QPL Listed

125 VAC · 125 VDC · Super-Quick-Acting FF

See below:
Approvals and Compliances

Description
- ESCC QPL Listed, see www.escies.org
- Full data sheet available on request
- Hermetically sealed, robust and smallest construction with high breaking capacity up to 300 A

Unique Selling Proposition
- ESA ESCC QPL (Qualified Parts List)
- SnPb finish - effective whisker growing barrier
- Extensive control and screening procedures during production

Applications
- Applications where highest reliability and availability is needed
- Space

References
Alternative: Standard version MGA

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

Technical Data

Rated Voltage	32 - 125 VAC, 125 VDC
Rated current	0.14 - 3.5 A
Breaking Capacity	50 A - 300 A
Characteristic	Super-Quick-Acting FF
Mounting	PCB,SMT
Admissible Ambient Temp.	-55 °C to 150 °C
Climatic Category	55/150/21 acc. to IEC 60068-1
Material: Housing	Ceramics
Material: Terminals	Tin-Plated Copper Alloy (with lead)
Unit Weight	0.035 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Variant Code

Soldering Methods	Reflow, Wave Soldering Profile
Solderability	235 °C / 2 sec acc. to IEC 60068-2-58, Test Td
Resistance to Soldering Heat	260 +0/-5 °C / 10 sec acc. to IEC 60068-2-58, Test Td
Moisture Sensitivity Level	MSL 1, J-STD-020

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.

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	ESCC Basics Specification Nr. 4008	This specification defines the general requirements for the qualification, qualification maintenance, procurement, and delivery of fuses for space applications. This specification contains the appropriate inspection and test schedules and also specifies the data documentation requirements.
	Designed according to	ESCC Detail Specification Nr. 4008/001	This specification details the ratings, physical and electrical characteristics and test and inspection data for the component type variants and/or the range of components specified below.

Application standards

Application standards where the product can be used

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

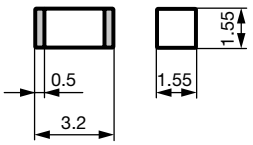
Compliances

The product complies with following Guide Lines

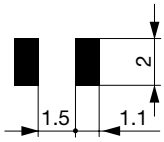
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UKCA	UKCA declaration 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.
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.
e	Avionics and Space	ECSS	Qualified according to ESCC Generic Specification 4008 and associated detail specification 4008/001 as recommended by the Space Components Steering Board

Dimension [mm]

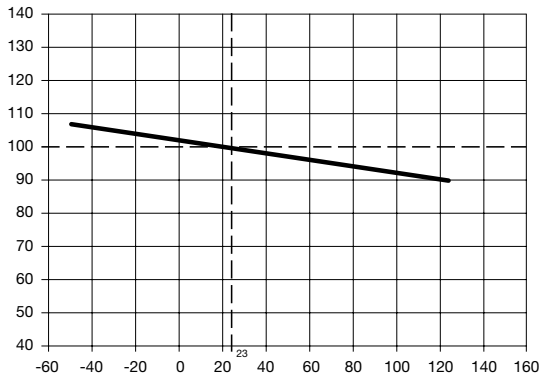
3.2 mm



Reflow soldering pads



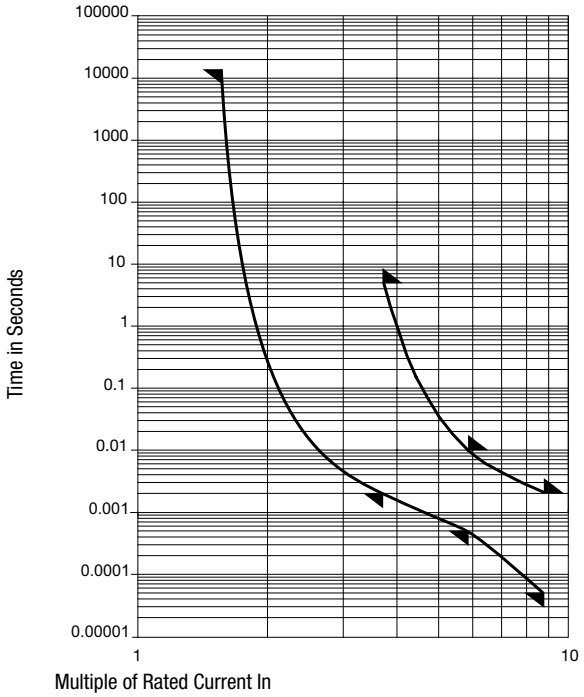
Derating Curves



Pre-Arcing Time

Rated Current In	1.43 x In min.	3.58 x In min.	3.58 x In max.	5.71 x In min.	5.71 x In max.	8.57 x In min.	8.57 x In max.
0.14 A - 3.5 A	4 h	2 ms	5 s	500 us	10 ms	50 us	2 ms

Time-Current-Curves



Catalogue Page

ESCC GENERIC SPECIFICATION N° 4008

Order Entry

PRODUCTION

Production with
Product and Quality Tests

CHART F2 - PRODUCTION CONTROL

External Visiual Inspection
according to Paragraph 5.2.1

Dimension Check
according to Paragraph 5.2.2

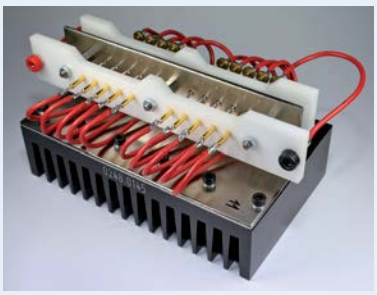
Cold Resistance
Initial Measurement
according to Paragraph 5.2.1

Current Carrying Capacity and
Overload Operation Test
according to Paragraph 5.2.4/5.2.5

CHART F3 - SCREENING TESTS

Voltage drop
Initial Measurement
according to Paragraph 8.1.1.2

Burn-In (168h)
according to Paragraph 8.3



Test Equipment for Burn-In

Voltage drop
Final Measurement
according to Paragraph 8.1.1.2

Cold Resistance
Final Measurement
according to Paragraph 8.1.1.1

External Visual Inspection
according to Paragraph 8.2

Solderability
according to Paragraph 8.4

Current Carrying Capacity and
Overload Operation
according to Paragraph 8.5/8.6

Check for Lot Failure
according to Paragraph 6.4

Delivery with COC

Flight Model, see ESCC QPL
Approved according to
ESCC Generic Specification no. 4008 +
ESCC Detail Specification no. 4008/001

All Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.43 In typ. [mV]	Cold Resistance typ. [mΩ]	Melting I²t 5.71 In typ. [A²s]	ESCC Component Number	Order Number
0.14	125	125	1)	258	1020	0.0008	400800101	3410.0310
0.175	125	125	1)	250	800	0.0009	400800102	3410.0311
0.262	125	125	1)	165	361	0.0037	400800103	3410.0312
0.35	125	125	1)	150	247	0.0042	400800104	3410.0313
0.525	125	125	1)	100	115	0.01	400800105	3410.0314
0.7	125	125	1)	124	98.7	0.035	400800106	3410.0315
1.05	125	125	1)	105	56	0.064	400800107	3410.0316
1.4	125	125	1)	98	39	0.089	400800108	3410.0317
1.75	125	125	1)	90	29.5	0.15	400800109	3410.0318
2.1	125	125	1)	88	24.1	0.18	400800110	3410.0319
2.8	63	125	2)	83.5	17	0.23	400800111	3410.0320
3.5	32	125	3)	90	13.5	0.45	400800112	3410.0321

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

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
acc. IEC 60286-3 Type 2a

750 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 18cm]

25.09.2024

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.