

Solid State, Thin Film, SMD 3220 Fuse for High Current Space Application, ESCC QPL Listed



63 VAC · 125 VDC · Quick-Acting F

See below:

[Approvals and Compliances](#)**Description**

- ESCC QPL Listed, see [www.escies.org](http://www.escies.org)
- Full data sheet and engineering handbook available on request
- Sealed, robust and smallest construction based on MGA-S experiences with high breaking capacity up to 1000 A

**Unique Selling Proposition**

- ESA ESCC QPL (Qualified Parts List)
- SnPb finish - effective whisker growing barrier
- 100% X-ray checked

**Technical Data**

Rated Voltage	63 VAC, 125 VDC
Rated current	5 - 15 A
Breaking Capacity	200 A - 1000 A
Characteristic	Quick-Acting F
Mounting	PCB, SMT
Admissible Ambient Temp.	-50 °C to 125 °C
Climatic Category	55/125/56 acc. to IEC 60068-1
Material: Housing	Ceramics
Material: Terminals	Tin-Plated Copper Alloy (with lead)
Unit Weight	0.8 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Variant Code, Certification marks

**Applications**

- Applications where highest reliability and availability is needed
- Space

**References**Alternative: Standard version [HCF](#)**Weblinks**

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Landing Page](#)

Soldering Methods	Reflow, Wave <a href="#">Soldering Profile</a>
Solderability	235 °C / 2 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
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	MIL-STD-202, Method 108 Condition F 2000h @ 0.8 x ln @ 125 °C
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)
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.





**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. 4008/002	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.

**Compliances**

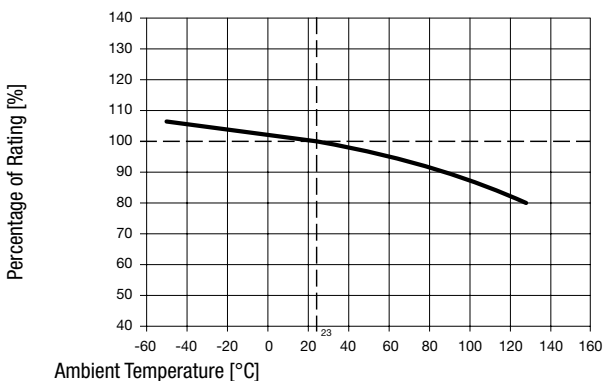
The product complies with following Guide Lines

Identification	Details	Initiator	Description
	<a href="#">CE declaration of conformity</a>	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.
	<a href="#">UKCA declaration of conformity</a>	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.
	<a href="#">REACH</a>	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.
	<a href="#">Avionics and Space</a>	ECSS	Qualified according to ESCC Generic Specification 4008 and associated detail specification 4008/001 as recommended by the Space Components Steering Board

**Dimension [mm]**



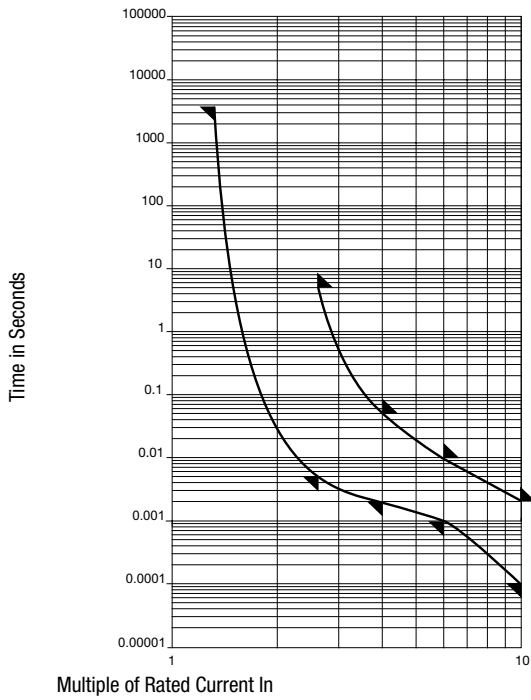
**Derating Curves**



**Pre-Arcing Time**

Rated Current In	1.25 x In min.	2.5 x In min.	2.5 x In max.	4.0 x In min.	4.0 x In max.	6.0 x In min.	6.0 x In max.	10.0 x In min.	10.0 x In max.
5 A - 15 A	> 1 h	5 ms	5 s	2 ms	50 ms	1 ms	10 ms	0.1 ms	2 ms

**Time-Current-Curves**



**All Variants**

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 $I_n$ typ. [mV]	Cold Resistance typ. [mΩ]	Melting I <sup>2</sup> t 10.0 $I_n$ typ. [A <sup>2</sup> s]	ESCC Component Number	Order Number
5	63	125	1)	105	13.8	1.9	400800224	3409.0007
7.5	63	125	1)	107	10	3.8	400800226	3409.0009
10	63	125	1)	110	8.2	8.5	400800228	3409.0011
15	63	125	1)	85	4.3	22	400800232	3409.0015

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

1) 200 A @ 63 VAC, p.f. > 0.999 / 1000 A @ 125 VDC, L/R < 1 ms

**Packaging Unit**

acc. IEC 60286-3 Type 2a

100 pcs. in Blister Tape [W: 16mm and P1: 8mm] on Reel [A: 18cm] in ESD Plastic Bag