EV Fuse 10.3 x 38 mm, 800 VDC, up to 50 A

new

Screw-on mounting

PCB terminals

Screw-on mounting (Axial)

800 VDC · Quick-Acting F

See below:
Approvals and Compliances

Description
- High breaking capacity up to 20 kA @ 800 VDC
- Manifold mounting versions

Unique Selling Proposition
- Designed for electric vehicles (EV Car)
- Very high rated current up to 50 A

Applications
- Battery Management System
- On-Board Battery Charger
- DC/DC Converters
- Air-Conditioning Compressor
- PTC Heater

References
Version for Fuse Clip on request

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

Technical Data

Rated Voltage	750 - 800 VDC
Rated current	10 - 50 A
Breaking Capacity	20 kA
Characteristic	Quick-Acting F
Mounting	PCB/THT, Screw
Admissible Ambient Temp.	-40 °C to 125 °C
Material: Tube	Ceramics
Material: Endcaps	Copper Alloy
Unit Weight	13.6 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	⊟, Type, Rated current, Rated Voltage, Breaking Capacity, CE mark, Approvals

Soldering Methods	Reflow, Wave Soldering Profile
Solderability	JESD22-B102E, Method 1
Resistance to Soldering Heat	JEDEC J-STD-020, Method B
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 5 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Operational Life	MIL-STD-202, Method 108 1000h @ 0.7 x In @ 125°C
Mechanical Shock	MIL-STD-202, Method 213 Condition C
Resistance to Solvents	MIL-STD-202, Method 215
Terminal Strength	MIL-STD-202, Method 211A

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: AMO 10x38

Approval Logo	Certificates	Certification Body	Description
c UL us	UL Approvals	UL	UR File Number: E184831

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

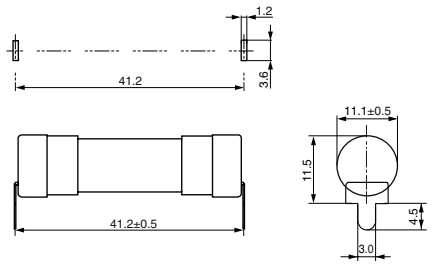
The product complies with following Guide Lines

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.
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
China RoHS	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.

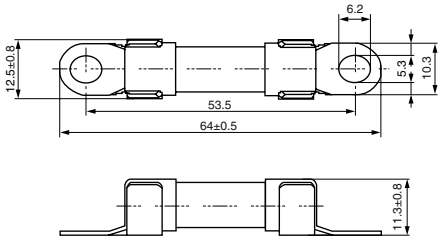
Dimension [mm]

38 mm

PCB terminals

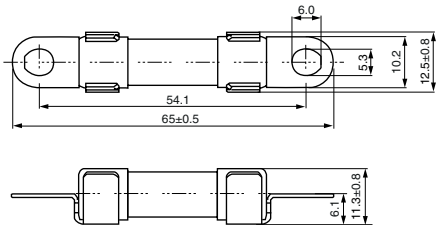


Screw-on mounting



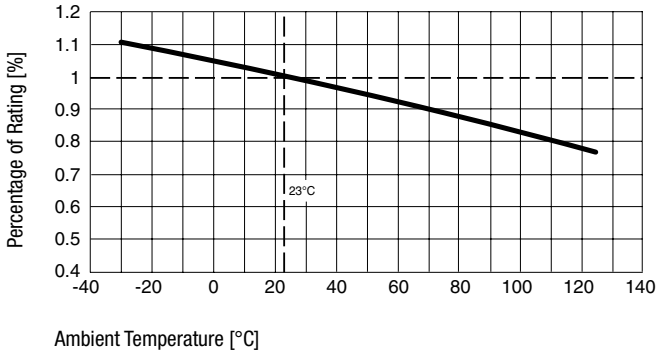
Mounting Torque: 3-5Nm
M5 screw shall be applied

Screw-on mounting (Axial)



Mounting Torque: 3-5Nm
M5 screw shall be applied

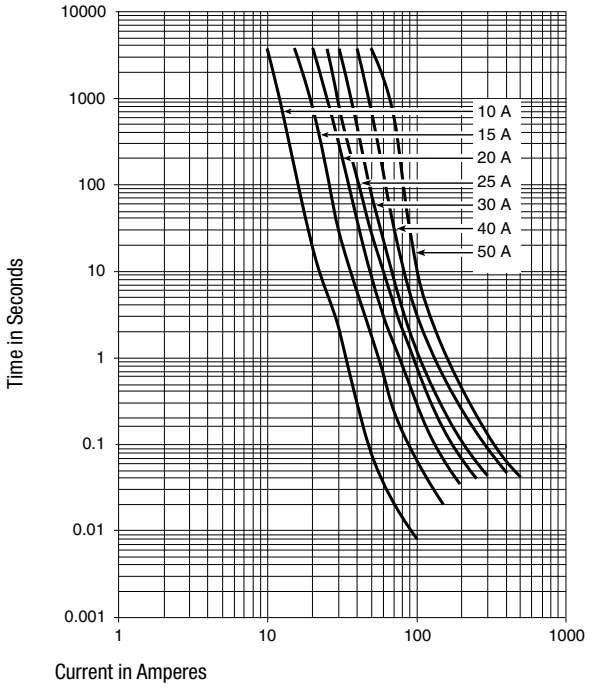
Derating Curves



Pre-Arcing Time

Rated Current In	1.13 x In min.	1.35 x In max.	2.0 x In min.	2.0 x In max.	3.0 x In min.	3.0 x In max.	5.0 x In min.	5.0 x In max.
10 A - 50 A	60 min	60 min	500 ms	100 s	100 ms	15 s	30 ms	1 s

Time-Current-Curves



Variants

Rated Current [A]	Mounting	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 I_n max. [mV]	Power Dissipation 1.0 I_n typ. [mW]	Melting I^2t 10.0 I_n typ. [A^2s]	cULus	Order Number
10	Screw	800	1)	260	2000	76	●	3-151-005
15	Screw	800	1)	200	2300	478	●	3-151-006
20	Screw	800	1)	175	2500	1510	●	3-151-007
25	Screw	800	1)	165	3000	2492	●	3-151-008
30	Screw	800	1)	175	3600	3892	●	3-151-009
40	Screw	750	2)	165	4800	7112	●	3-151-010
50	Screw	750	2)	200	6700	10012	●	3-151-011
10	Screw (Axial)	800	1)	260	2000	76	●	3-151-012

Rated Current [A]	Mounting	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 I_n max. [mV]	Power Dissipation 1.0 I_n typ. [mW]	Melting I^2t 10.0 I_n typ. [A^2s]	c UL us	Order Number
15	Screw (Axial)	800	1)	200	2300	478	●	3-151-013
20	Screw (Axial)	800	1)	175	2600	1510	●	3-151-014
25	Screw (Axial)	800	1)	165	3000	2492	●	3-151-015
30	Screw (Axial)	800	1)	175	3700	3892	●	3-151-016
40	Screw (Axial)	750	2)	165	4900	7112	●	3-151-017
50	Screw (Axial)	750	2)	200	6800	10012	●	3-151-018
10	PCB	800	1)	260	2000	76	●	3-151-019
15	PCB	800	1)	200	2300	478	●	3-151-020
20	PCB	800	1)	175	2600	1510	●	3-151-021
25	PCB	800	1)	165	3000	2492	●	3-151-022
30	PCB	800	1)	175	3900	3892	●	3-151-023
40	PCB	750	2)	165	5200	7112	●	3-151-024
50	PCB	750	2)	200	7600	10012	●	3-151-025

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

1) UL: 20 kA @ 800 VDC with L/R < 1 ms

2) UL: 20 kA @ 750 VDC with L/R < 1 ms

Packaging Unit Bulk (100 pcs.)

01.09.2025