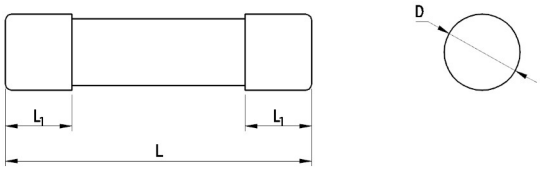
Miniature Fuses
(Cartridge Fuse-links)

SC625 Series, Fast/Medium Acting, Ceramic Tube

Dimensions (mm)



L	L_1	D
$25.4^{+0.8}_{-0.4}$	5.5 ± 0.8	$\Phi 6.30^{+0.20}_{-0.05}$

Description

Φ6.3 x 25.4 mm, Fast/Medium Acting, high breaking capacity cartridge fuse, designed to BS & IEC standards.

Features

- Physical Size: Φ6.3 × 25.4 mm
- Fast/Medium Acting
- High Breaking Capacity
- Ceramic Tube, Nickel-plated Brass End cap Construction
- Designed To BS 1362, IEC 60269-3, GB/T 13539.3
- Lead-free (Pb-free)
- RoHS & REACH Compliant

Part Numbering System

SC625FM13A264V

- Rated Voltage
- Rated Current
- Fast/Medium Acting
- Product Series

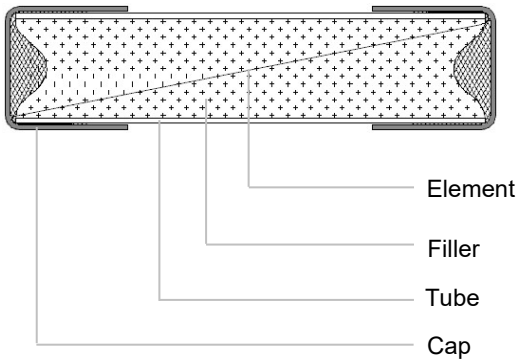
Applications

- BS Plug
- BS Socket
- Household Appliance
- Smart Home
- Cable

Agency Approvals

Agency Approvals	Agency File Number	Ampere Range (A)
CCC	Pending	3 to 13
ASTA	Pending	3 to 13

Structure Diagram



Miniature Fuses

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68723 Plankstadt

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E-Mail: sales@alpha-therm.de
Web: www.alpha-therm.com

Glossary

Item	Description
Fuse	An overcurrent protective device with a fusible link that operates and permanently opens the circuit on an overcurrent condition.
Rated Current	The rated current of a fuse identifies its current-carrying capacity based on a controllable set of test conditions. Each fuse is marked with its rated current.
Rated Voltage	A maximum open circuit voltage in which a fuse can be used, yet safely interrupt an over-current. Exceeding the voltage rating of a fuse impairs its ability to clear an overload or short circuit safely.
Ampere Squared Seconds I^2t	The melting, arcing, or clearing integral of a fuse, termed I^2t, is the thermal energy required to melt, arc, or clear a specific current. It can be expressed as melting I^2t, arcing I^2t or the sum of them, clearing I^2t.
Time-current Characteristics	Under stated conditions of operation, the value of time as a function of the prospective current.
Rated Breaking Capacity	Value (r.m.s. for a.c.) of prospective current that a fuse-link is capable of breaking at a stated voltage under prescribed conditions of use and behaviour.

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Specifications

Series	Rated Current	Rated Voltage	Rated Breaking Capacity	Rated Power Dissipation	Average Typical Melting I^2t [a]	Color	Agency Approvals		Environmental	
							CCC	ASTA	RoHS	REACH
	(A)	(VAC)		(W)	(A^2sec)					
SC625	3	264	6 kA@264 VAC [b]	1	33.2	Red	○	○	●	●
SC625	5	264			164	Black	○	○	●	●
SC625	7	264			232	Black	○	○	●	●
SC625	10	264			365	Black	○	○	●	●
SC625	13	264			1052	Brown	○	○	●	●

a: The fusing time used to calculate I^2t shall be within the standard range of 8 ms ~ 10 ms.

b: 50 Hz, P.f. 0.3-0.4 .

○: Pending.

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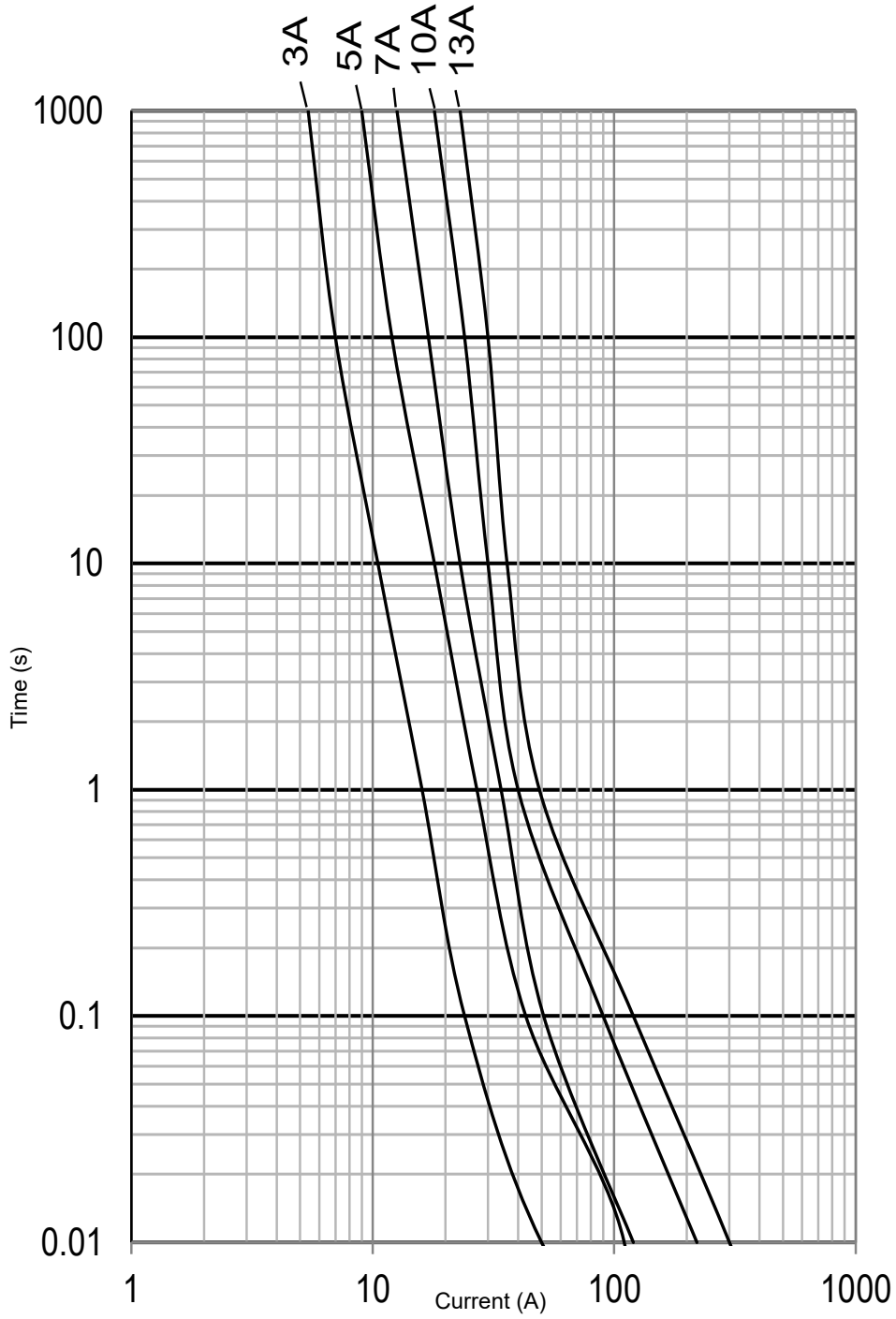
Opening Time / Current Characteristic

Rated Current (A)	$1.6I_N$	$1.9I_N$
	Min.	Max.
3 to 13	30 minutes	30 minutes

Time Current Curve (For Reference Only)



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Reliability Test

No.	Items	Inspection Standards	Standards
1	High Temp. Test	Test Condition: Temperature: (105 ± 2) °C Time: 1000 hours Test Requirement: After the test, the voltage drop shall not have changed by more than 10% of the value measured before the test. The clearing time of the fuse shall be in range.	MIL-STD-202(Test Method 108) GJB360B(Test Method 108)
2	High Humidity Test	Test Condition: Temperature: (40 ± 2) °C Humidity: 90% to 95% Time: 96 hours Test Requirement: After the test, the voltage drop shall not have changed by more than 10 % of the value measured before the test. The clearing time of the fuse shall be in range.	MIL-STD-202(Test Method 103) GJB360B(Test Method 103)
3	Thermal Shock Test	Test Condition: Per Cycle: -40 °C / 30 minutes, 85 °C / 30 minutes Time: 10 Cycles Test Requirement: After the test, the voltage drop shall not have changed by more than 10 % of the value measured before the test. The clearing time of the fuse shall be in range.	MIL-STD-202(Test Method 107) GJB360B(Test Method 107)

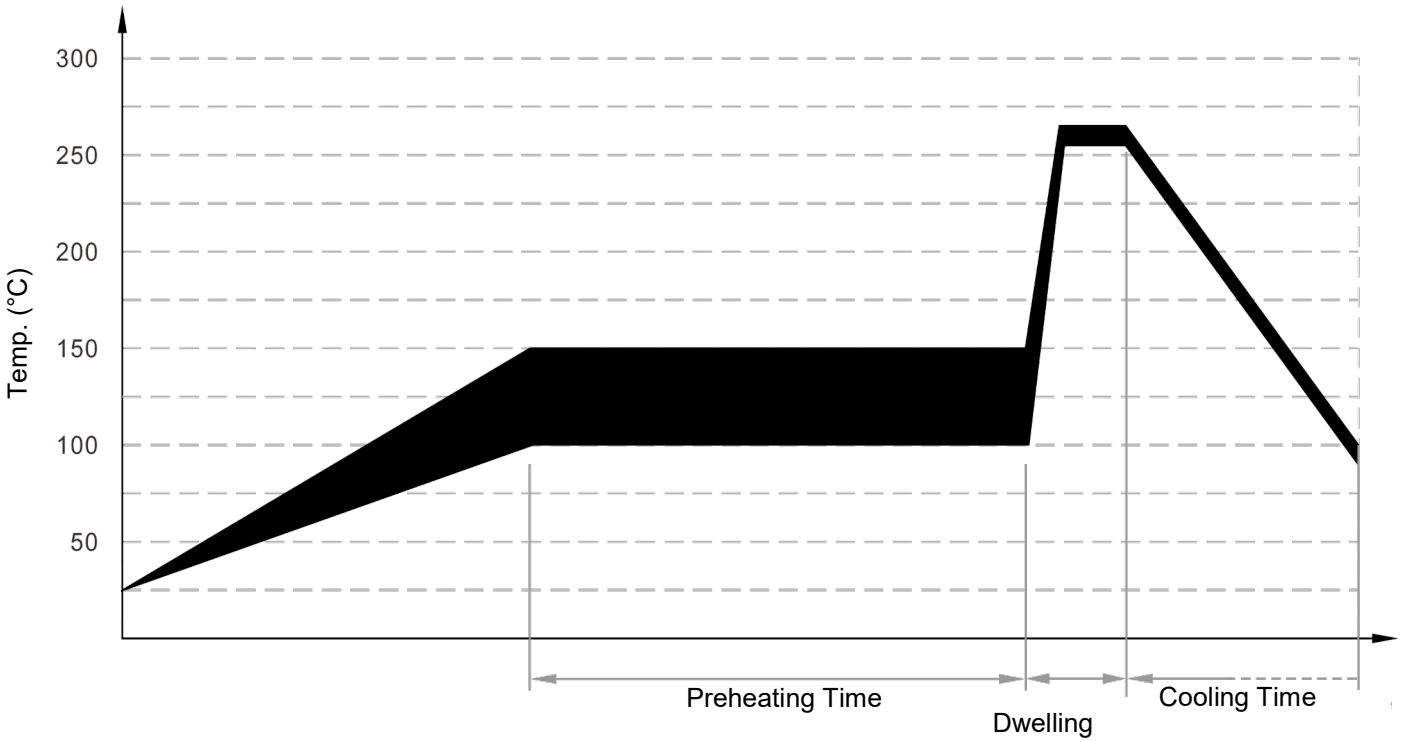
Miniature Fuses

Installation

Mechanical stress

Do not apply mechanical stress to the fuse body during or after the installation.

Wave soldering Parameters (For Reference Only)



Item	Temp. (°C)	Time (s)
Preheating	100 to 150	60 to 180
Dwelling	260 ± 5	2 to 5

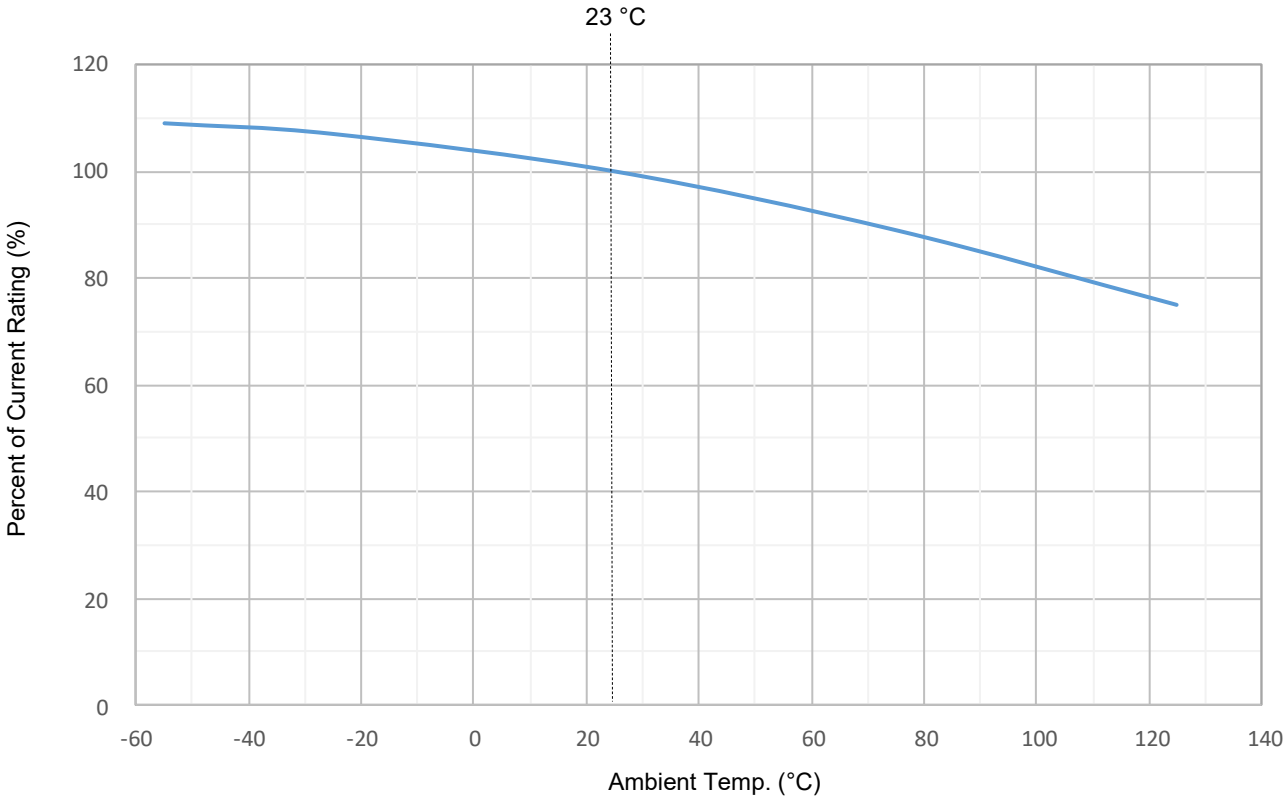
Recommended Hand-Soldering Parameters

Solder Iron Temp.: (350 ± 5) °C

Heating Time: 5 seconds Max.

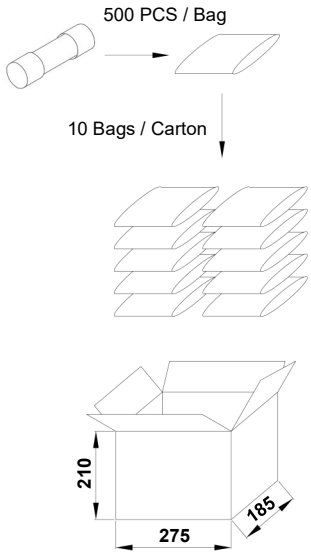
Miniature Fuses

Temperature Derating Curve



Packaging Information

All dimensions in mm



Cartridge Type		
Item	**Bag**	**Carton**
Q'ty (PCS)	500	5,000
Gross Weight (kg)	14.0×(1±10%)	

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ATTENTION

Inspection

Cold Resistance Test

a. Applied current shall be less than 10% of rated current, at ambient Temp. of (23±2) °C.

b. (4-Wire) Resistance Measurement.

Usage

a. Do not touch the fuse body or lead wire when power on, avoiding scald or electric shock.

b. Air pressure is 80 kPa to 106 kPa. These values represent an altitude of +2000 m to -500 m, respectively.

Replacement

For safety reasons, the Fuse is the non-resettable product, please ensure that the alternative Fuse is the same type when replace it.

Storage

Please store the fuse in the environment without high temperature, high humidity or corrosive gas, to avoid reducing the solderability of the lead wire. Please use them up within 1 year after receiving the goods.