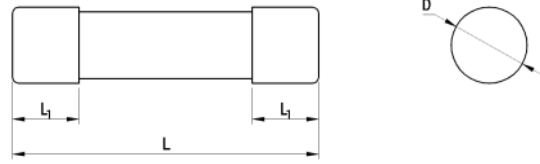


# Miniature Fuses (Cartridge Fuse-links)

## SC625 Series, Fast/Medium Acting, Ceramic Tube



### Dimensions (mm)



L	L <sub>1</sub>	D
25.4 <sup>+0.8</sup> <sub>-0.4</sub>	5.5 ± 0.8	Φ6.30 <sup>+0.20</sup> <sub>-0.05</sub>

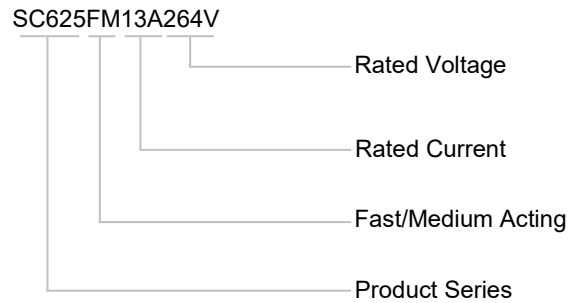
### Description

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



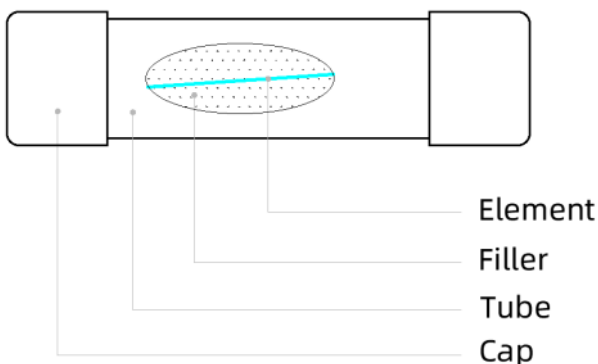
### Agency Approvals

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

### Applications

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

### Structure Diagram



Miniature Fuses

Miniature Fuses

**Glossary**

Item	Description
<b>Fuse</b>	An overcurrent protective device with a fusible link that operates and permanently opens the circuit on an overcurrent condition.
<b>Rated Current</b>	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.
<b>Rated Voltage</b>	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.
<b>Ampere Squared Seconds <math>I^2t</math></b>	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 $I^2t$ .
<b>Time-current Characteristics</b>	Under stated conditions of operation, the value of time as a function of the prospective current.
<b>Rated Breaking Capacity</b>	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.



Miniature Fuses

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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	
	(A)	(VAC)		(W)	(A <sup>2</sup> sec)				RoHS	REACH
							CCC	ASTA		
SC625	3	264	6 kA@264 VAC <sup>b</sup>	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.

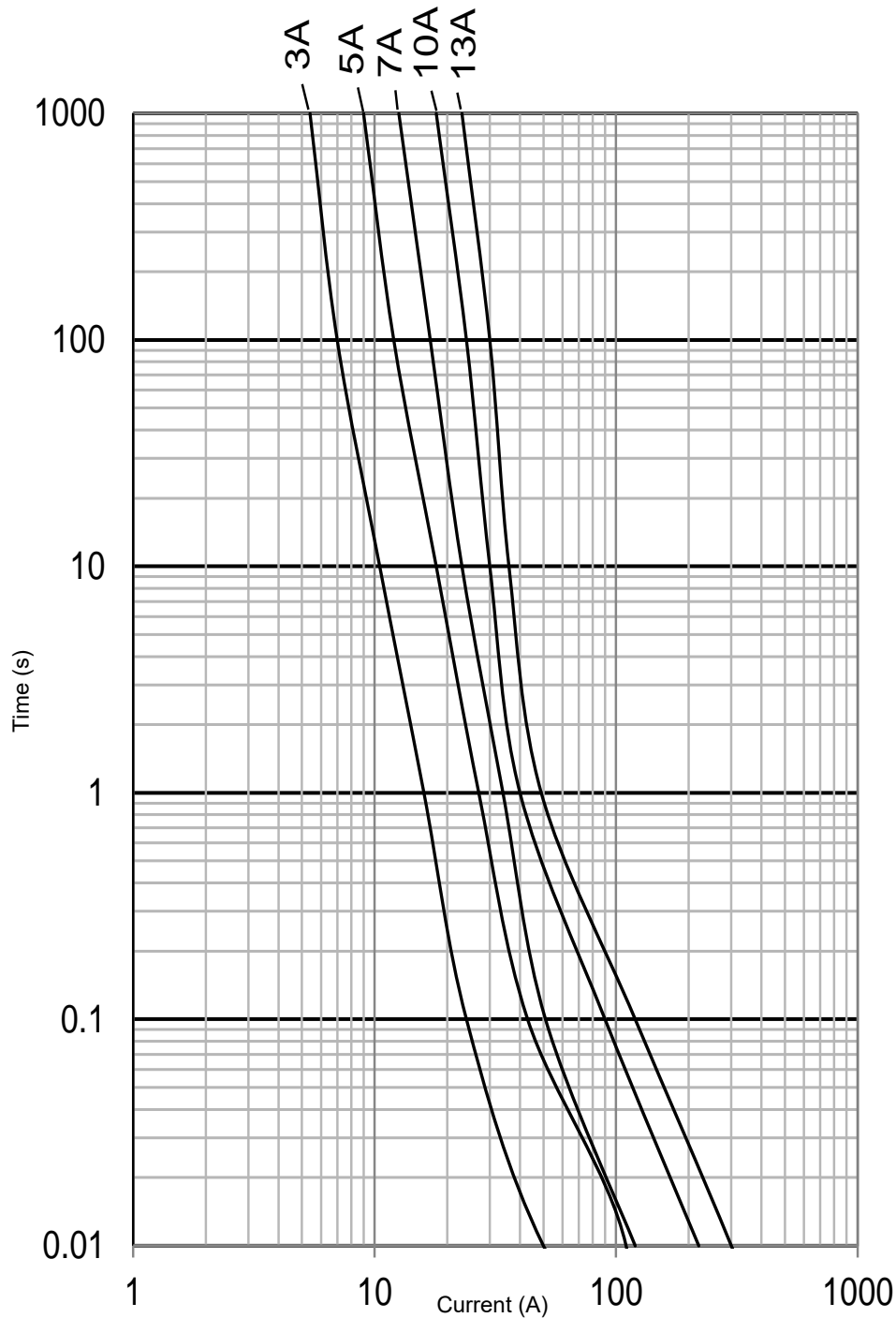
# Miniature Fuses (Cartridge Fuse-links)

SC625 Series, Fast/Medium Acting, Ceramic Tube

## Opening Time / Current Characteristic

Rated Current (A)	1.6I <sub>N</sub>	1.9I <sub>N</sub>
	Min.	Max.
3 to 13	30 minutes	30 minutes

## Time Current Curve ( For Reference Only)



Miniature Fuses

Miniature Fuses

**Reliability Test**

No.	Items	Inspection Standards	Standards
1	High Temp. Test	<p>Test Condition:                      Temperature: (105 ± 2) °C                      Time: 1000 hours</p> <p>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.</p>	<p>MIL-STD-202(Test Method 108)                      GJB360B(Test Method 108)</p>
2	High Humidity Test	<p>Test Condition:                      Temperature: (40 ± 2) °C                      Humidity: 90% to 95%                      Time: 96 hours</p> <p>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.</p>	<p>MIL-STD-202(Test Method 103)                      GJB360B(Test Method 103)</p>
3	Thermal Shock Test	<p>Test Condition:                      Per Cycle:                      -40 °C / 30 minutes, 85 °C / 30 minutes                      Time: 10 Cycles</p> <p>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.</p>	<p>MIL-STD-202(Test Method 107)                      GJB360B(Test Method 107)</p>

Miniature Fuses

Miniature Fuses

# Miniature Fuses (Cartridge Fuse-links)

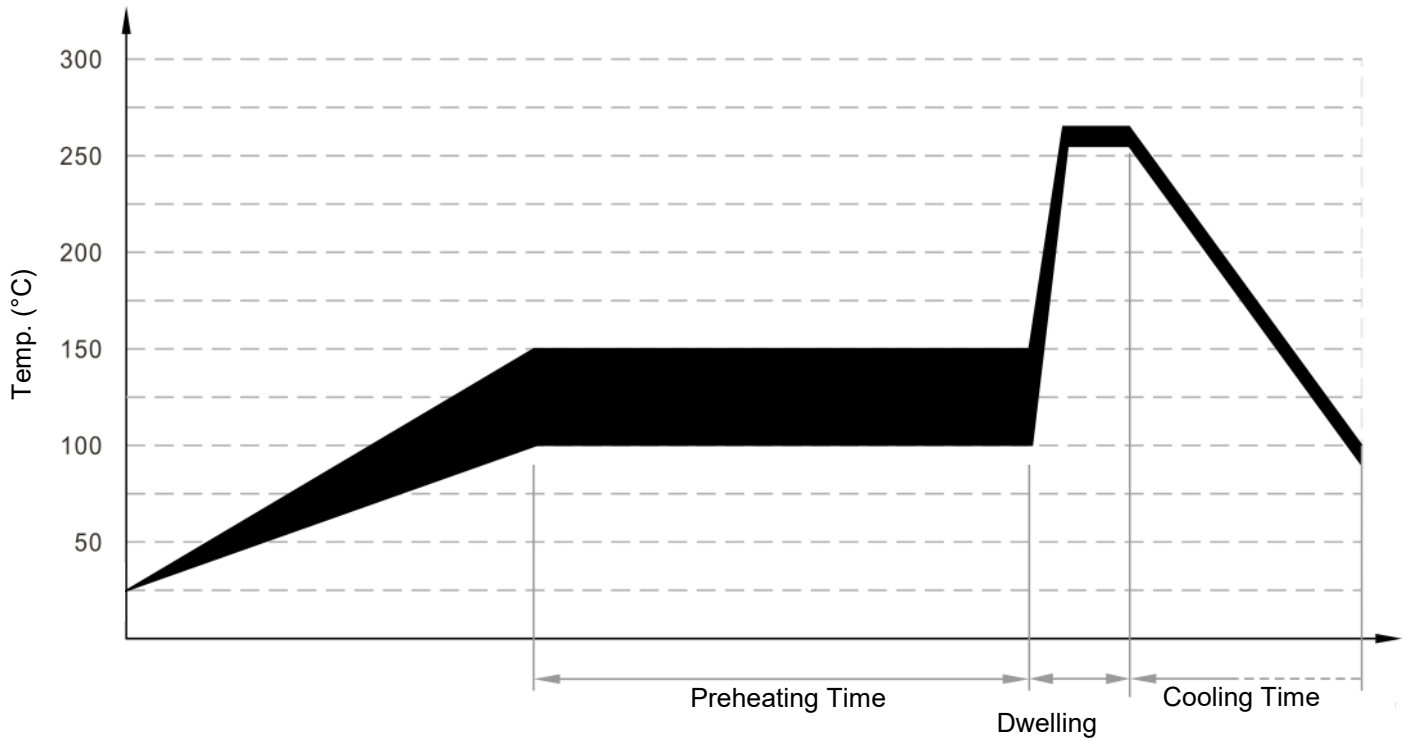
SC625 Series, Fast/Medium Acting, Ceramic Tube

## 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

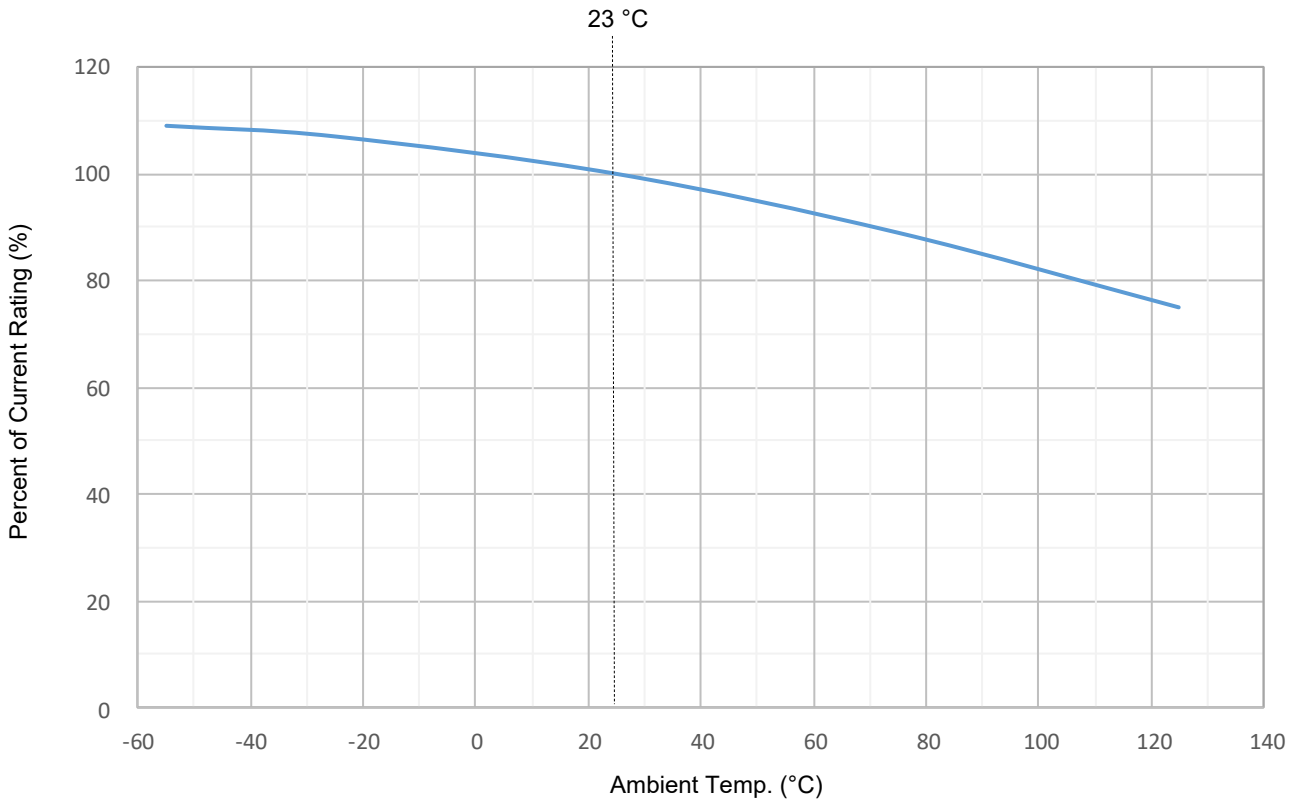
Solder Iron Temp.: (350 ± 5) °C

Heating Time: 5 seconds Max.

# Miniature Fuses (Cartridge Fuse-links)

SC625 Series, Fast/Medium Acting, Ceramic Tube

## Temperature Derating Curve



Miniature Fuses

Miniature Fuses

## Packaging Information

All dimensions in mm



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



# ATTENTION

## Inspection

### Cold Resistance Test

- Applied current shall be less than 10% of rated current, at ambient Temp. of  $(23\pm 2)$  °C.
- (4-Wire) Resistance Measurement.

## Usage

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