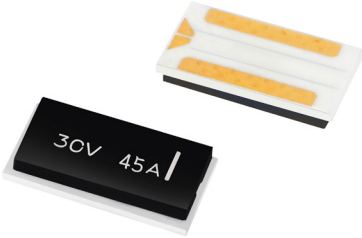


SMD Fuses 9550, 45A

multicomp **PRO**

RoHS
Compliant



Description

This Series is a surface mountable battery protector designed to protect against both over current and overcharging. Fuse can cut off the circuit when over current occurs. Also, combining with IC and FET, the embedded heater can generate heat to blow the fuse element to achieve over voltage protection.

Application

- Moped
- Lawn mower
- Energy storage batteries
- Vacuum cleaner
- Electric scooters
- Electric bicycles
- BMS
- Robot

Features

- Protect Li-ion battery from over current and overcharge
- Substrate embedded Resistor
- Surface mounted fuse
- Halogen free / Sb free
- Fast response time

Specification Table

Part Number	Applicable cells in series	Rated Current (A)	Rated Voltage (V DC)	Breaking Capacity (A)	Fuse Resistance (mΩ)	Operating Voltage (V)	Heater Resistance (Ω)
MCATF955012V45A	3 cells	45	80	120	0.4 ~ 2	9.8 ~ 13.5	1.9 ~ 2.9
MCATF955014V45A	4 cells					13 ~ 18.4	3.4 ~ 5.1
MCATF955020V45A	5 cells					16.7 ~ 23.5	5.6 ~ 8.4
MCATF955030V45A	6-7 cells					22.3 ~ 31.5	10 ~ 15
MCATF955040V45A	9-10 cells					33 ~ 46.9	22 ~ 33
MCATF955050V45A	12-14 cells					43.7 ~ 62	38.5 ~ 57.8

Electrical Characteristics

Items	Conditions	Requirements / Result
Current carrying capacity	Apply 100% of its rated current.	No melting.
Fusing time	Apply 200% of its rated current.	The fuse shall be melt within 1min.
	The minimum value of the operating voltage range of each model shall be applied to heater.	
Operating temperature range	The following examinations are executed respectively within the range from -10 to 65°C. <ul style="list-style-type: none"> • Fusing time test • Current carrying capacity test 	The fuse shall be passed each test.

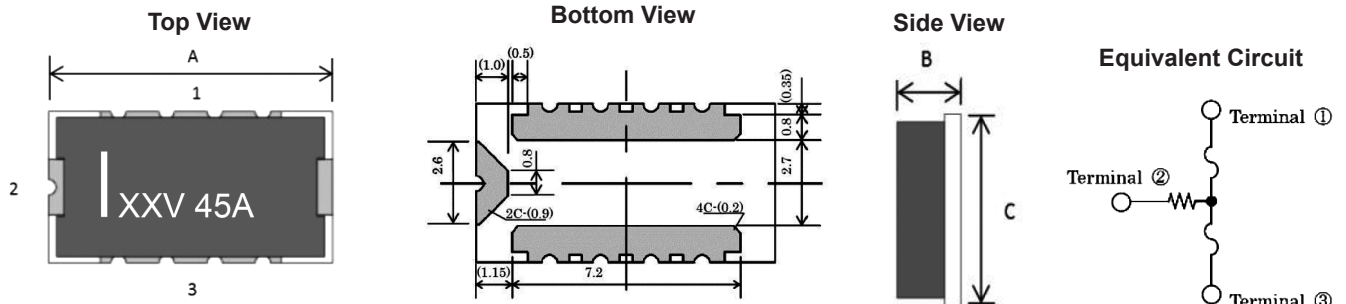
*Electrical characteristics are influenced by thermal capacity of PCB, parts, pattern width, etc. Therefore you should check them on your PCB.

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

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SMD Fuses 9550, 45A

Diagram

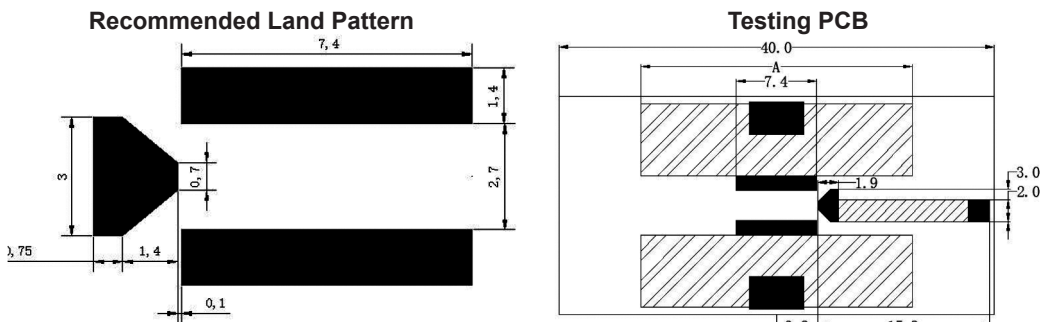


Dimension

Code	Spec.(mm)
A	9.5 ±0.5
B	2 Max.
C	5 ±0.5

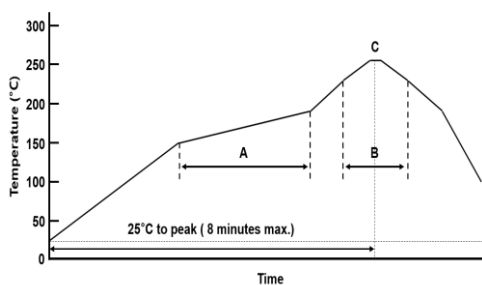
*Without extra notification the tolerance is ± 0.1mm

Recommended Solder Land Pattern and PCB



Materials	Width (A)	Thickness	Copper Thickness	Wires
FR-4	25mm	0.6mm	3.0 OZ	AWG10

Reflow Profile Recommended

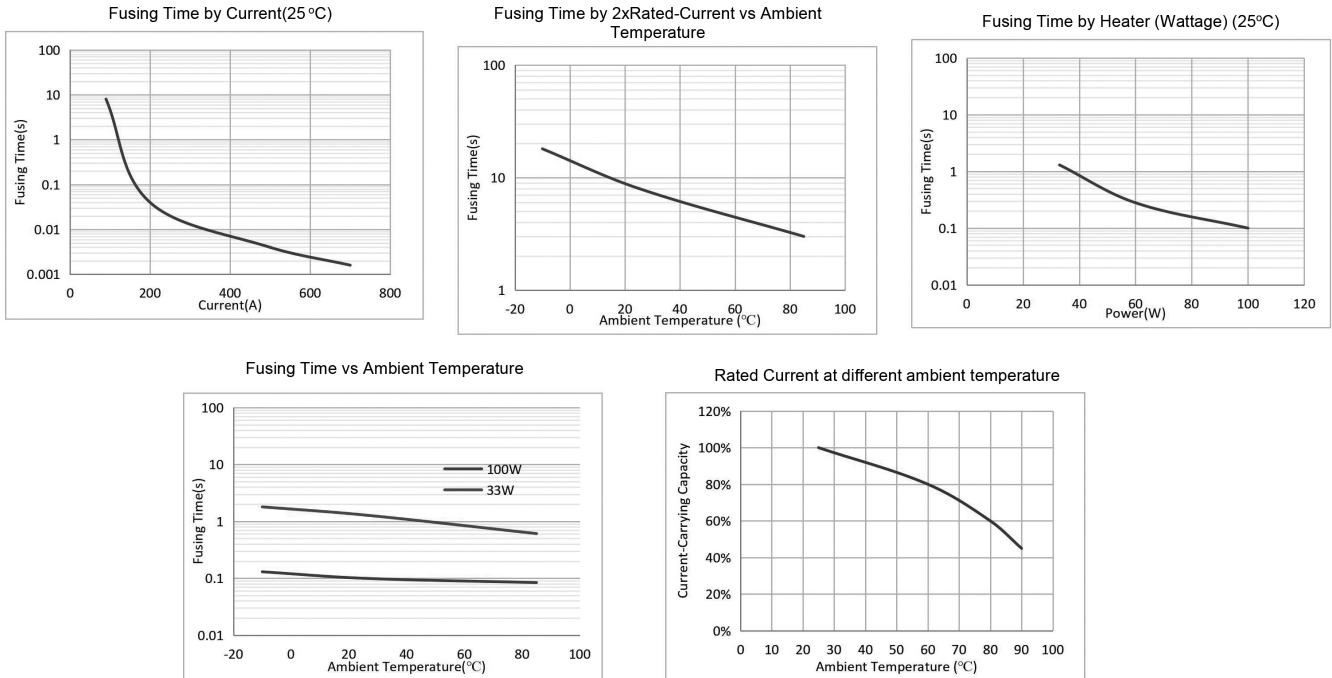


Code	Temperature (°C)	Time (s)
A (Pre-Heating)	150~190	90 ±30
B (Heating)	Over 230	25 ±5
C (Peak)	255 ± 5	Max. 5

Dimensions : Millimetres

SMD Fuses 9550, 45A

Typical Performance Data (Ambient Temperature: 25°C)



Part Number Table

Description	Part Number
SMD Fuse, 9550 Series, 45A, 12V	MCATF955012V45A
SMD Fuse, 9550 Series, 45A, 14V	MCATF955014V45A
SMD Fuse, 9550 Series, 45A, 20V	MCATF955020V45A
SMD Fuse, 9550 Series, 45A, 30V	MCATF955030V45A
SMD Fuse, 9550 Series, 45A, 40V	MCATF955040V45A
SMD Fuse, 9550 Series, 45A, 50V	MCATF955050V45A

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