



Features

- Industry's lowest internal resistance
- Switches at optimum temperature
- Axial leaded, with flexible design options available
- Fully compatible with current industry standards
- Weldable nickel terminals
- Agency recognition: [®]
- RoHS compliant*

MF-SVS Series - PTC Resettable Fuses

Electrical Characteristics

| Model | V max. Volts | I max. Amps | I_{hold} | | I_{trip} | | | Initial Resistance | | | 1 Hour (R_1) Post-Trip Resistance | | Max. Time to Trip | | Tripped Power Dissipation |
|-----------|--------------|-------------|------------------|------|---------------|-------|-------|--------------------|--|------|---------------------------------------|------------------|-------------------|----------------|---------------------------|
| | | | Amperes at 23 °C | | Ohms at 23 °C | | | Ohms at 23 °C | | | Ohms at 23 °C | Amperes at 23 °C | Seconds at 23 °C | Watts at 23 °C | |
| | | | Hold | Trip | Min. | Max. | Typ. | Max. | | | | Typ. | | | |
| MF-SVS170 | 10 | 100 | 1.7 | 4.1 | 0.018 | 0.032 | 0.023 | 0.064 | | 8.5 | 5.0 | 2.1 | | | |
| MF-SVS175 | 10 | 100 | 1.75 | 4.2 | 0.017 | 0.031 | 0.022 | 0.063 | | 8.5 | 5.0 | 2.1 | | | |
| MF-SVS210 | 10 | 100 | 2.1 | 5.0 | 0.010 | 0.020 | 0.016 | 0.040 | | 10.5 | 5.0 | 2.4 | | | |
| MF-SVS230 | 10 | 100 | 2.3 | 5.2 | 0.010 | 0.018 | 0.014 | 0.036 | | 12.5 | 5.0 | 2.6 | | | |

Environmental Characteristics

| | |
|---|---|
| Operating Temperature..... | -40 °C to +85 °C |
| Storage Conditions..... | +40 °C max. 70 % R.H. max. |
| Maximum Device Surface Temperature in Tripped State | 125 °C |
| Passive Aging..... | +60 °C, 1000 hours..... ±10 % typical resistance change |
| Humidity Aging..... | +60 °C, 85 % R.H. 1000 hours..... ±10 % typical resistance change |
| Thermal Shock | MIL-STD-202F, Method 107G,..... ±5 % typical resistance change |
| | +85 °C to -40 °C, 10 times |
| Vibration | MIL-STD-883C,..... No change |
| | Condition A |

Test Procedures And Requirements For Model MF-SVS Series

| Test | Test Conditions | Accept/Reject Criteria |
|------------------------------|---|--------------------------------------|
| Visual/Mech..... | Verify dimensions and materials..... | Per MF physical description |
| Resistance..... | In still air @ 23 °C..... | $R_{min} \leq R \leq R_{1max}$ |
| Time to Trip..... | At specified current, V_{max} , 23 °C..... | $T \leq$ max. time to trip (seconds) |
| Hold Current..... | 30 min. at I_{hold} | No trip |
| Trip Cycle Life..... | V_{max} , I_{max} , 100 cycles..... | No arcing or burning |
| Trip Endurance | V_{max} , 48 hours..... | No arcing or burning |
| UL File Number | E174545 | |
| | http://www.ul.com/ Follow link to Certifications, then UL File No., enter E174545 | |
| CSA File Number..... | CA110338 | |
| | http://directories.csa-international.org/ Under "Certification Record" and "File Number" enter 110338-0-000 | |
| TÜV Certificate Number | R 02057213 | |
| | http://www.tuvdotcom.com/ Follow link to "other certificates", enter File No. 2057213 | |

Thermal Derating Chart - I_{hold} (Amps)

| Model | Ambient Operating Temperature | | | | | | | | |
|-----------|-------------------------------|--------|------|-------|-------|-------|-------|-------|-------|
| | -40 °C | -20 °C | 0 °C | 23 °C | 40 °C | 50 °C | 60 °C | 70 °C | 85 °C |
| MF-SVS170 | 3.3 | 2.8 | 2.3 | 1.7 | 1.3 | 1.0 | 0.8 | 0.5 | 0.1 |
| MF-SVS175 | 3.4 | 2.9 | 2.3 | 1.75 | 1.3 | 1.1 | 0.8 | 0.5 | 0.1 |
| MF-SVS210 | 3.8 | 3.3 | 2.7 | 2.1 | 1.6 | 1.3 | 1.1 | 0.8 | 0.4 |
| MF-SVS230 | 4.2 | 3.6 | 3.0 | 2.3 | 1.8 | 1.4 | 1.1 | 0.8 | 0.4 |

* I_{trip} is approximately two times I_{hold} .

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

Applications

- Any battery pack application that requires protection with the lowest possible resistance:
 - Rechargeable battery packs; designed for NiMH and Li-Ion chemical characteristics
 - Cellular / cordless phone rechargeable battery packs
 - Laptop computer battery packs

MF-SVS Series - PTC Resettable Fuses

BOURNS®

Product Dimensions

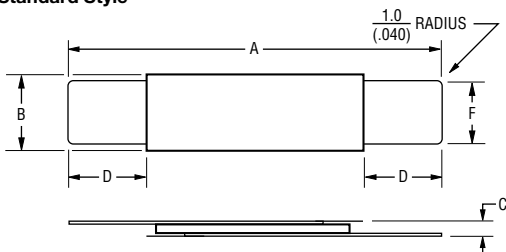
| Model | A | | B | | C | | D | | F | |
|-------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| MF-SVS170 | 16.0 (0.630) | 18.0 (0.709) | 4.9 (0.193) | 5.5 (0.216) | 0.6 (0.024) | 0.9 (0.035) | 4.1 (0.161) | 5.8 (0.228) | 3.9 (0.154) | 4.1 (0.161) |
| MF-SVS170N | 22.0 (0.866) | 24.0 (0.945) | 3.6 (0.142) | 3.9 (0.153) | 0.6 (0.024) | 0.9 (0.035) | 4.1 (0.161) | 5.8 (0.228) | 2.4 (0.094) | 2.6 (0.102) |
| MF-SVS175 | 16.0 (0.630) | 18.0 (0.709) | 4.9 (0.193) | 5.5 (0.216) | 0.6 (0.024) | 0.9 (0.035) | 4.1 (0.161) | 5.8 (0.228) | 3.9 (0.154) | 4.1 (0.161) |
| MF-SVS175N | 22.0 (0.866) | 24.0 (0.945) | 3.6 (0.142) | 3.9 (0.153) | 0.6 (0.024) | 0.9 (0.035) | 4.1 (0.161) | 5.8 (0.228) | 2.4 (0.094) | 2.6 (0.102) |
| MF-SVS175NL | 26.0 (1.024) | 28.0 (1.102) | 3.6 (0.142) | 3.9 (0.153) | 0.6 (0.024) | 0.9 (0.035) | 6.1 (0.240) | 7.8 (0.307) | 2.4 (0.094) | 2.6 (0.102) |
| MF-SVS210 | 20.9 (0.823) | 23.1 (0.909) | 4.9 (0.193) | 5.5 (0.216) | 0.6 (0.024) | 0.9 (0.035) | 4.1 (0.161) | 5.8 (0.228) | 3.9 (0.154) | 4.1 (0.161) |
| MF-SVS210N | 30.0 (1.181) | 32.0 (1.260) | 3.6 (0.142) | 3.9 (0.153) | 0.6 (0.024) | 0.9 (0.035) | 4.1 (0.161) | 5.8 (0.228) | 2.4 (0.094) | 2.6 (0.102) |
| MF-SVS230 | 20.9 (0.823) | 23.1 (0.909) | 4.9 (0.193) | 5.5 (0.216) | 0.6 (0.024) | 0.9 (0.035) | 4.1 (0.161) | 5.8 (0.228) | 3.9 (0.154) | 4.1 (0.161) |

Packaging: Bulk - 500 pcs. per bag. Tape and Reel - Consult factory.
Leads: 1/4 Hardened Nickel 0.125 mm (.005") nom.

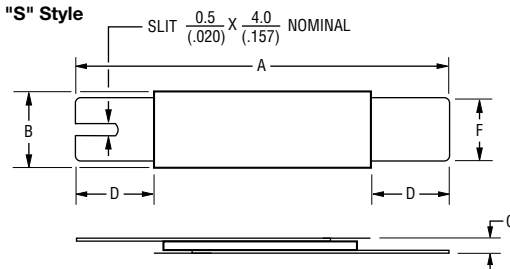
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

NOTE: All "S" style models available with 1 or 2 slots. The dimensions and shape of the leads can be modified to suit the battery pack design. All models are available without insulation wrapping.

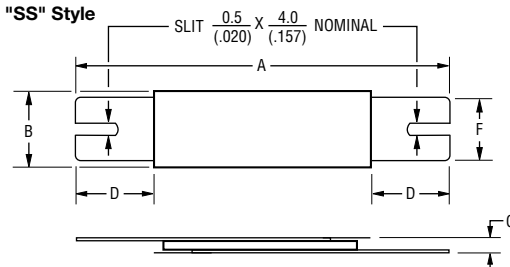
Standard Style



"S" Style



"SS" Style

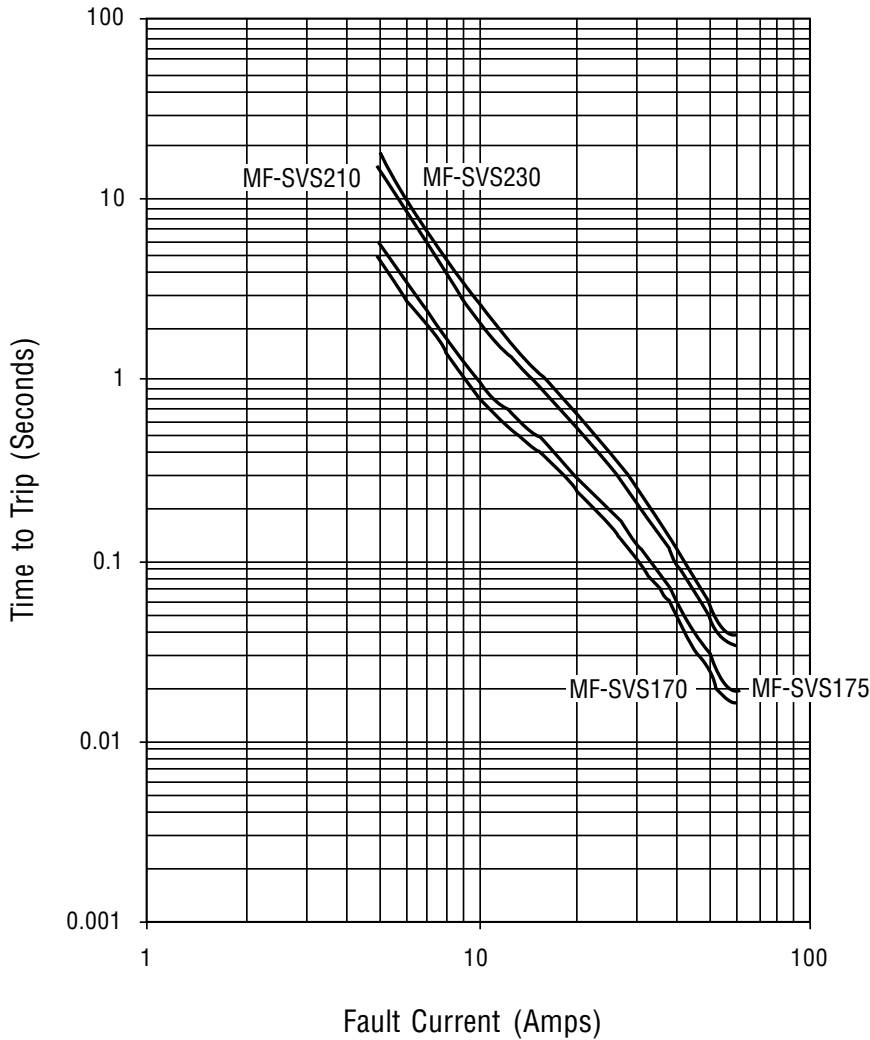


Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

MF-SVS Series - PTC Resettable Fuses



Typical Time to Trip at 23 °C



How to Order

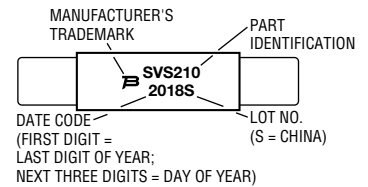
MF - SVS 210 -

- Multifuse®
- Product Designator
- Series
- SVS = Axial Leaded "Strap" Component
- Hold Current, I_{hold} 170-230 (1.70 - 2.30 Amps)
- Narrow Device Option N = Narrow (3.6mm)
- Lead Option S = Slotted Lead Option (one side) SS = Slotted Lead Option (two sides)
- Longer Lead Option L = Longer Leads
- Insulating Option U = Non-Insulated Option
- Packaging Option -0 = Bulk Packaging -2 = Tape and Reel* (Consult factory)

*Packaged per EIA 486-B

Typical Part Marking

Represents total content. Layout may vary.



MF-SVS, REV. Z, 03/13

Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9