




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

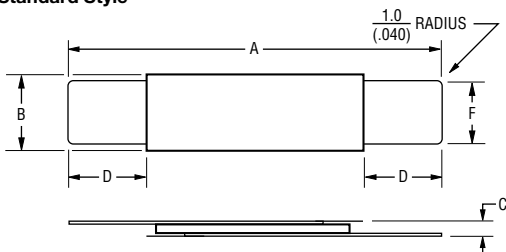
| Model | A | | B | | C | | D | | F | |
|-------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| 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.

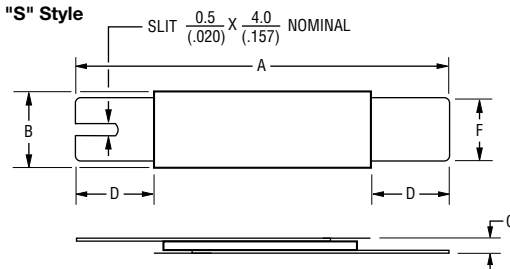
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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.

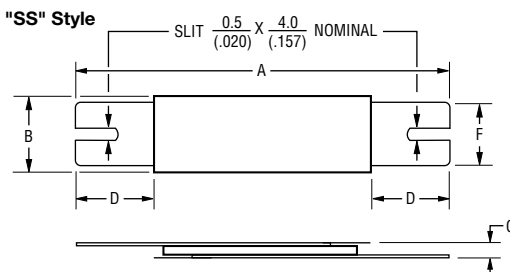
Standard Style



"S" Style



"SS" Style

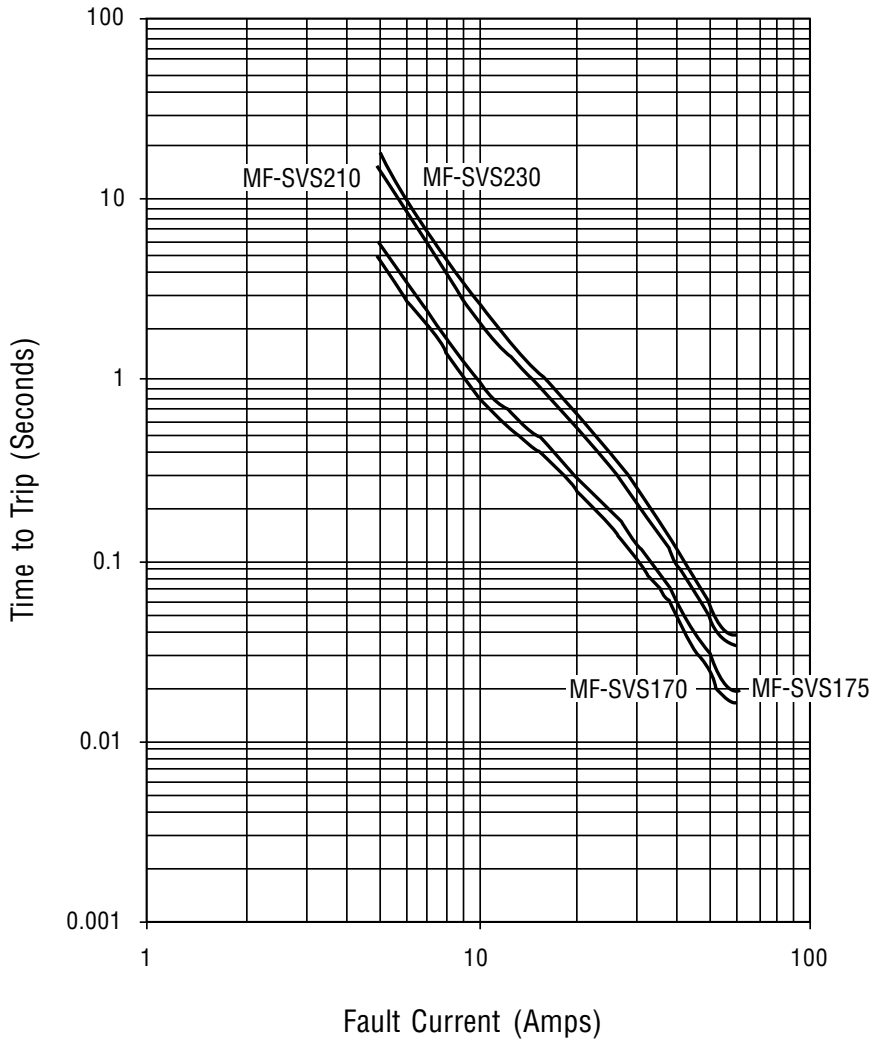


Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

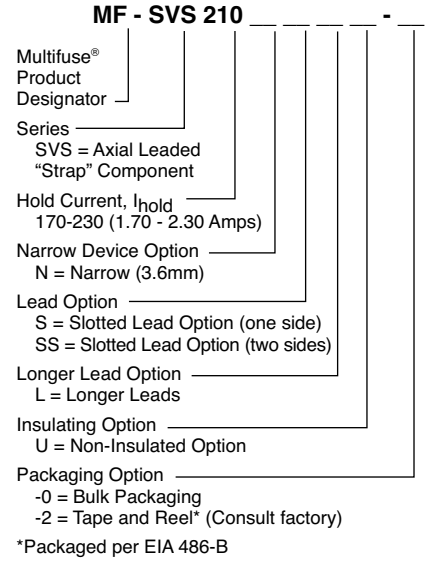
MF-SVS Series - PTC Resettable Fuses



Typical Time to Trip at 23 °C

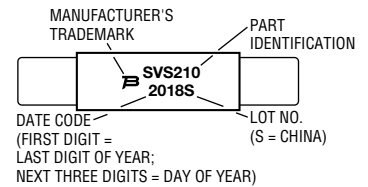


How to Order



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.



Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

Наши контакты:

Телефон: +7 812 627 14 35

Электронная почта: sales@st-electron.ru

Адрес: 198099, Санкт-Петербург,
Промышленная ул, дом № 19, литера Н,
помещение 100-Н Офис 331