

NEC/Schott SEFUSE thermal cutoffs

Limator GmbH

Components for temperature,
current & time

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SF/E series



RoHS*-
compliant
since april
2003

SF/E series measures 4.2mm in body diameter
and is VDE approved 10A + 15A at AC250V

| part no. | Tf / TF | opening- temp. | Th / TH | Tmax |
|----------|---------|-------------------|---------|------|
| SF70E | 73C | 70+-2C | 58C | 150C |
| SF76E | 77C | 76+0/-4C | 62C | 150C |
| SF91E | 94C | 91+3/-1C | 79C | 150C |
| SF96E | 99C | 96+-2C | 84C | 150C |
| SF113E | 113C | 110+-2C | 98C | 160C |
| SF119E | 121C | 119+-2C | 106C | 150C |
| SF129E | 133C | 129+-2C | 118C | 159C |
| SF139E | 142C | 139+-2C | 127C | 159C |
| SF152E | 157C | 152+-2C | 142C | 172C |
| SF169E | 172C | 169+1/-3C | 157C | 189C |
| SF184E | 184C | 184+0/-4C | 174C | 210C |
| SF188E | 192C | 188+3/-1C | 177C | 375C |
| SF214E | 216C | 214+1/-3C | 200C | 375C |
| SF226E | 227C | 226+1/-3C | 200C | 300C |
| SF240E | 240C | 237+-2C | 200C | 375C |

Thermal cutoffs are required by safety agencies where a nonresettable fuse (one shot) MUST open the electrical circuit in the event of failure or overheating.

The SF/E series carries worldwide approvals such as VDE, UL, CSA, BEAB, PSE (Japan) and is produced in ISO 9001 certified facilities in Japan and Thailand.
Contact material inside all SF series of thermal cutoffs is AgCuO. This material AgCuO is patented worldwide for use in thermal cutoffs and provides superior performance and prevents sticking together of contacts. This is an important safety and reliability issue for customers using DC current in automotive applications and AC current in the electrical appliance industry.

lead wire length:
SF/E: 20/35mm
SF/E-1: 35/35mm

tape & reel version available.

lead wire forming and cutting available.

approval ratings:

VDE: AC250V 10A + 15A resistive load

UL: AC120V 20A resistive & 15A inductive load
and AC250V 17A & 277V 15A resistive load

CSA: AC250V 15A resistive load and inductive load

note: types SF169E, SF188E, SF214E, SF226E, SF240E are approved UL Conductive Heat Aging Test (CHAT).

SF/K series



RoHS-compliant
since start of
massproduction
in 2003

SF/K series measures 3.0mm in body diameter
and is VDE approved 6A + 10A at AC250V

| part no. | Tf / TF | opening- temp. | Th / TH | Tmax |
|----------|---------|-------------------|---------|------|
| SF70K | 73C | 70+-2C | 45C | 150C |
| SF76K | 77C | 76+0/-4C | 51C | 150C |
| SF91K | 94C | 91+3/-1C | 66C | 150C |
| SF96K | 99C | 96+-2C | 71C | 150C |
| SF119K | 121C | 119+-2C | 94C | 150C |
| SF188K | 192C | 188+3/-1C | 164C | 300C |
| SF214K | 216C | 214+1/-3C | 200C | 300C |

Thermal cutoffs are required by safety agencies where a nonresettable fuse (one shot) MUST open the electrical circuit in the event of failure or overheating.

The SF/K series carries worldwide approvals such as VDE, UL, c-UL, CSA, BEAB, PSE (Japan) and is produced in ISO 9001 certified facilities.

*WEEE waste
electrical electronic equipment. RoHS: restriction on the use of certain hazardous chemical substances. Target substances are: lead (Pb), mercury (Hg), cadmium (Cd), chromium <VI>, PBB and PBDE.

approval ratings:

VDE: AC250V 6A + 10A resistive load

UL: AC250V 6A + 10A resistive load

c-UL: AC250V 6A + 10A resistive load

note: type SF188K is approved UL Conductive Heat Aging Test (CHAT).

definition of terms, according to IEC691, VDE0821, EN60691 norm for thermal cutoffs:

- Tf/TF = functioning, opening temperature
- opening temperature with tolerance, given by the manufacturer
- Th/TH = holding temperature, max. continuous exposure temperature (in actual application at point of installation of thermal cutoff). Tested for 168h.
- Tmax (or Tm/TM) = maximum overshoot temp., up to which the function of the thermal cutoff will not be impaired or altered. No reconduction to occur.

typical applications for SF/E & SF/K series:

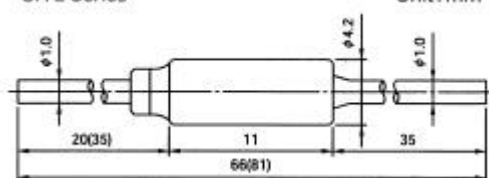
coffeemakers, irons, large and small electrical appliances and heating elements. transformers, motors, heaterblowers and airconditioners in cars. Transistors of electronic circuits and so on.

Contact material inside all SF series of thermal cutoffs is AgCuO. This material is patented worldwide for use in thermal cutoffs and provides superior performance and prevents sticking together of contacts. This is an important safety and reliability issue for customers using DC current in automotive applications and AC current in the electrical appliance industry.

lead wire length:
SF/K: 41/35mm
tape & reel version

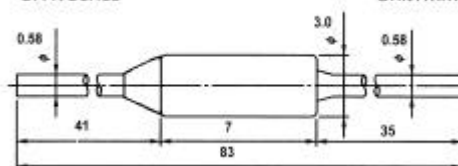
• SF/E Series

Unit: mm



• SF/K Series

Unit: mm



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