

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

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).

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.

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

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.

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

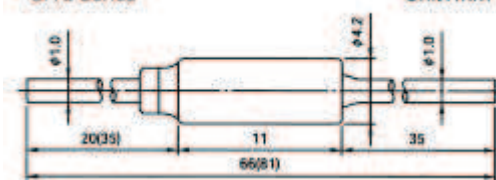
*WEEE waste
electrical electronic
equipment. RoHS:
restriction on the use
of certain hazardous
chemical substances.
Target substances
are: lead (Pb),
mercury (Hg),
cadmium (Cd),
chromium <VI>,
PBB and PBDE.

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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

