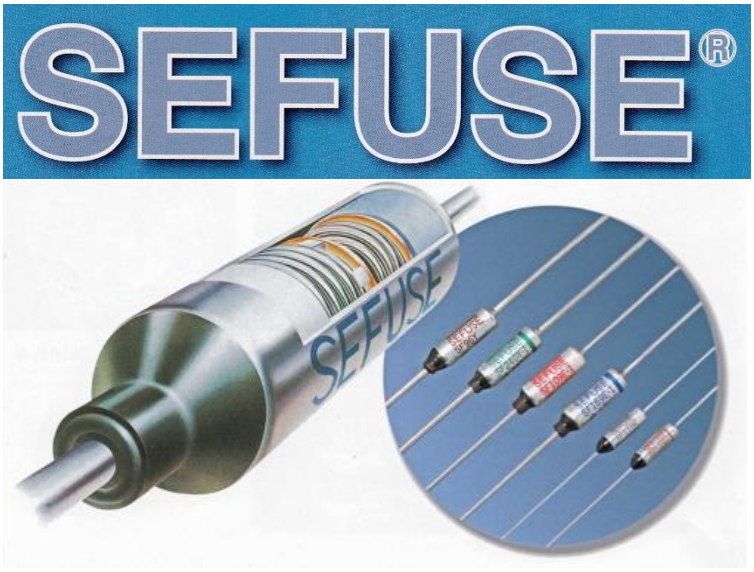
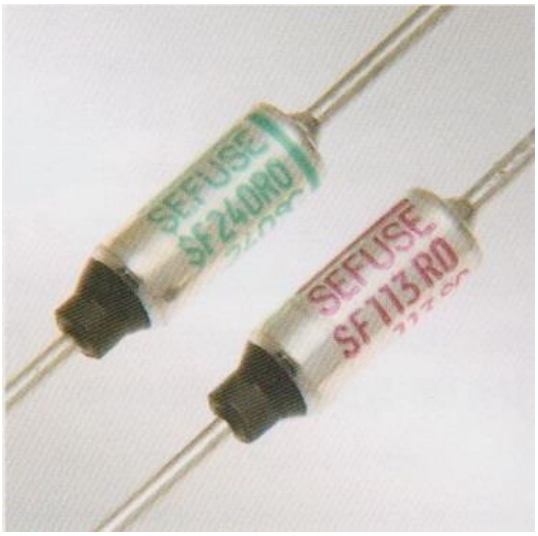
SEFUSE Brand Thermal Cutoff Fuses

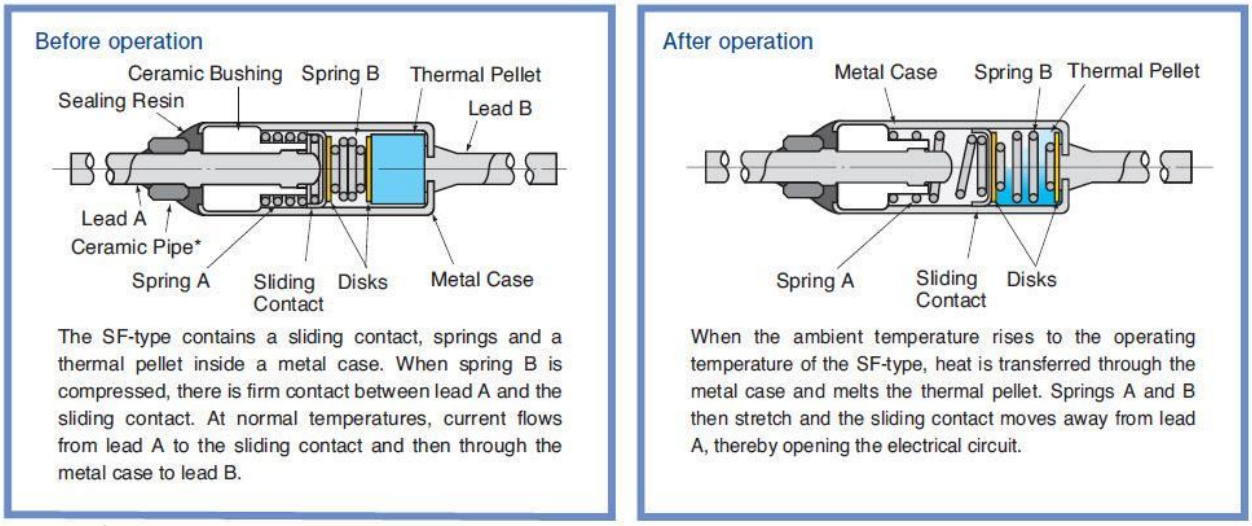


Chatham Components Inc. is the North and South American distributor of the SEFUSE Brand Thermal Cutoff fuse also known as a TCO, Thermal Link, Thermal Protector and Thermal Fuse. The SEFUSE brand of thermal cutoffs are manufactured by NEC/SCHOTT Components Corporation, Shiga, Japan. The SEFUSE thermal fuse is the highest quality thermal fuse available to the manufacturing industry and is manufactured according to ISO9001 standards. Visit www.cci-tco.com for more information on Thermal Cutoff fuses from NEC/SCHOTT.

SEFUSE Brand R Series Thermal Cutoffs are available with axial lead wires. SEFUSE R series thermal fuses are designed for high current applications. The thermal sensitive pellet in the SEFFUSE brand TCO liquefies when the temperature rises to the melting point of the thermal element. This, in turn, allows a spring action to permanently break the electrical circuit. The final product is a high quality miniaturized, thermal pellet type cutoff unit with high current caring capacity and high reliability. SEFUSE R series thermal protectors are available in a variety of cutoff temperatures and are approved by most safety rating agencies including UL, cUL, VDE CCC, KTL and PSE. The SEFUSE R Series thermal cutoffs are RoHS and REACH Compliant.



Design and Operation SEFUSE R Series thermal fuses are of the non-resettable type. Thermal cutoff are integrated into the current carrying circuit and are located near the heat generating section of electrical components such as motors, transformers, power supplies battery packs etc. As the thermal fuse is exposeed to over heat conditions and the temperature reaches the melting point of the thermal element, the themal pellet melts and liquifies. This, in turn, allows a spring action to permanently break the electrical circuit passing through the thermal fuse.



The time required for heat transfer from the heat source to the thermal element in the thermal cut-off fuse depends upon many factors such as mounting conditions and location. Therefore, compliance with the manufacturer's installation instructions must be followed. In addition, sufficient testing must be performed to determine the optimal thermal cut-off specification and design for a particular application.

RoHS / REACH Compliant
Thermal Cutoffs

NEC/SCHOTT

SEFUSE®

SF / R Series

Part Number	Rated Functioning Temperature T_f (°C)	Cut-off Temperature (Operating Temperature) (°C)	Maximum Temperature Limit T_m (°C)	Holding Temperature T_h T_c (°C)
SF 70R0	73	70 ± 2	165	58
SF 76R0	77	76 $^{+0, -4}$	165	62
SF 81R0	84	81 $^{+3, -1}$	165	69
SF 90R0	94	90 ± 2	165	79
SF 94R0	99	94 ± 2	165	84
SF 113R0	113	108± 2	165	98
SF 119R0	121	119 ± 2	165	106
SF 129R0	133	129 ± 2	175	118
SF 139R0	142	139 ± 2	175	127
SF 144R0	144	142 ± 2	210	129
SF 150R0	152	150 $^{+1, -3}$	210	137
SF 167R0	167	164 ± 2	250	153
SF 184R0	184	182 ± 2	250	174
SF 188R0	192	188 $^{+3, -1}$	375	177
SF 214R0	216	214 $^{+1, -3}$	375	200
SF 229R0	229	227 ± 2	380	200
SF 240R0	240	237 ± 2	380	200

Safety Standard Approval UL/cUL-E71747, VFE-677802 -1171 -0015, KTL-Various, CCC-2013010205600209

-Part number indicates standard lead length (R0). For long lead length type, type number is changed to SF**R1.

-The electrical rating according to the various safety standards are shown in the following table.

RATED VOLTAGE	UL / cUL	VDE	CCC	KTL	PSE
AC120V	20A (Resistive)	-	-	-	
AC250V	10A (Resistive)	10A	10A	10A	10A
	15A (Resistive)	15A	15A	15A	15A
	16A (Resistive)	-	-	-	-

RoHS Compliant
Thermal Cutoffs

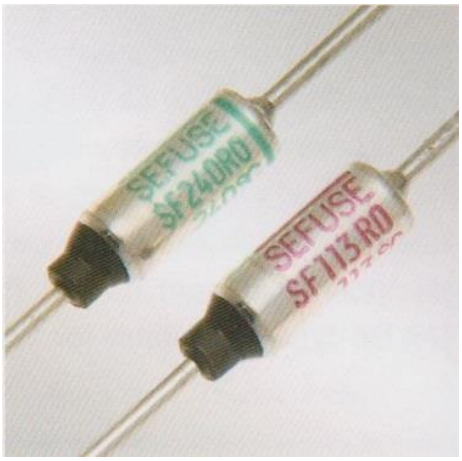
NEC/SCHOTT

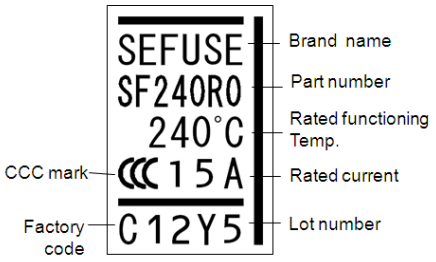
SEFUSE®

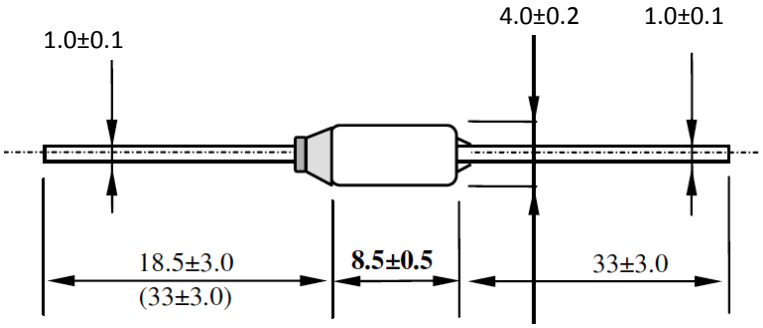
SF / R Series

Features

- Non-resettable thermal cutoff using an organic thermo-sensitive thermal element.
- Smaller fuse body than the E Series
- RoHS and REACH compliant.
- Higher Tm ratings then the E Series
- Remarkable sensitivity to temperature rise due to its shape and small size
- High reliability and accuracy due to resin-seal
- Appropriate for electric flows with large currents







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