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- Termofusibili /
Thermofuses**

58, 59, 60

**TERMOFUSIBILI
THERMOFUSES**

TEMPOMATIC®
S.R.L.

TERMOFUSIBILI

Tipo: SF/R - SM

SCHOTT
glass made of ideas

SEFUSE®

Thermal Links



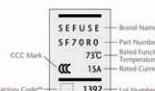
Dimension (Unit: mm)



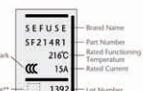
Note: The dimensions for long lead devices are in parentheses.



Marking 1 (SF70R~SF129R*)



Marking 2 (SF139R~SF240R*)



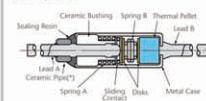
SF-type

Serie: SF/R, SFH/R, SF/K, SF/Y

The thermal pellet inside inside the metal case of the SF-type responds to an increased temperature insulation and triggers the cutoff function. The SF/R series features a large rated current of 64 to 15A (AC). Furthermore, the SFH/R series has higher T_m than conventional thermal links, as well as excellent insulation performance at high temperature conditions.

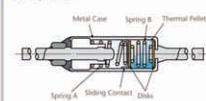


Before operation



The SF-type contains a sliding contact, springs and a thermal pellet inside a metal case. When spring B is compressed, there is no connection between lead A and lead B. At normal temperatures, current flows from lead A to the sliding contact and then through the metal case to lead B.

After operation



When the ambient temperature rises to the operating temperature of the SF-type, heat is transferred through the metal case to the thermal pellet. When the pellet reaches a certain temperature, it stretches and moves the contact away from lead A, thereby opening the electrical circuit.

*Not used in SF/R series.

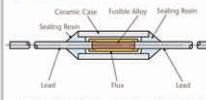
SM-type

Serie: SM/A, SM/B, SM/G

The SM-type uses a fusible alloy inside a ceramic case. As ceramic is an insulator, the SM-type can be fixed directly where temperature detection is required. The SM-type has a rated current of 0.5A to 2.0A (AC) / 3.0A to 7.0A (DC).

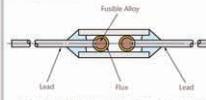


Before operation



The leads of the SM-type are connected by a fusible alloy which allows the current to flow directly from one lead to the other. The fusible alloy is coated with a special flux.

After operation



When the ambient temperature rises to the operating temperature of the SM-type, the fusible alloy melts and forms a drop around the end of each lead due to the surface tension of the molten metal. When the flux is removed, without a direct contact between the leads, the electrical circuit is opened.

Ratings

1) 2) Part Number *: 0/ 1: standard 1: long	Rated Functioning Temperature T _f (°C)	Operating Temperature (°C)	3) T _h (°C)	Rated Current	Rated Voltage	UL/cUL Thailand	VDE Thailand	CCC Thailand (SU05020 -****)	KTL Thailand (JET1974-32001 -****)	PSE Thailand (JET1974-32001 -****)
SF70R*	73	70±2	58							2001
SF76R*	77	76+0/-4	62						5004	1003
SF81R*	84	81+3/-1	69						2002	1002
SF90R*	94	90±2	79						5005	2003
SF94R*	99	94±2	84						2004	1004
SF113R*	113	108±2	98						2005	2005
SF119R*	121	119±2	106						2006	1006
SF129R*	133	129±2	118						2007	2007
SF139R*	142	139±2	127						2008	1008
SF144R*	144	142±2	129						2009	1009
SF150R*	152	150+1/-3	137							
SF167R*	167	164±2	153							
SF184R*	184	182±2	174							
SF188R*	192	188+3/-1	177							
SF214R*	216	214+1/-3		375						
SF229R*	229	227±2		200						
SF240R*	240	237±2		380						

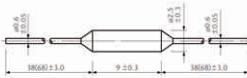
TEMPOMATIC

Tipo: SM / Type: SM

Standard Ratings

SM/A series

Dimension (Unit: mm)



Marking

S E F U S E
SM110A0
115C □ 395
2A (PSE) CCC JET

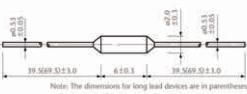
Brand Name: S E F U S E
Part Number: SM110A0
Rated Functioning Temperature: 115°C
Rated Current: 2A
PSE Mark: (PSE)
CCC Mark: CCC
Inspector Name: JET

** Factory Code represents the factory location as shown below:
Thailand - C

How to read a lot number:
m. 1 2 3 4 5 6
— Month
X — October
Y — November
Z — December
Last one digit of year

SM/B series

Dimension (Unit: mm)



Marking

S E F U S E
SM110B0
115C □ 395
1A (PSE) CCC JET

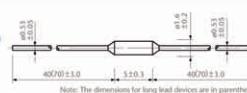
Brand Name: S E F U S E
Part Number: SM110B0
Rated Functioning Temperature: 115°C
Rated Current: 1A
PSE Mark: (PSE)
CCC Mark: CCC
Inspector Name: JET

** Factory Code represents the factory location as shown below:
Thailand - C

How to read a lot number:
m. 1 2 3 4 5 6
— Month
X — October
Y — November
Z — December
Last one digit of year

SM/G series

Dimension (Unit: mm)



Marking

(PSE) 0.5A
CCC □ 395
S E F U S E
Part Number: 110G0 115C

Rated Current: 0.5A
Factory Code* Lot Number: 115C
Brand Name: S E F U S E
Brand Functioning Temperature: 115°C

** Factory Code represents the factory location as shown below:
Thailand - C

How to read a lot number:
m. 1 2 3 4 5 6
— Month
X — October
Y — November
Z — December
Last one digit of year

Ratings

1) 2)	Rated Functioning Temperature Tf	Operating Temperature	Tm	Electrical Ratings		UL Thailand	CSA Thailand	VDE Thailand	BEAB Thailand	CCC Thailand	KTL Thailand (SU05020 -****)	PSE Thailand (JET1974 -32001 -****)
				AC	DC							
Part Number * : 0/1 0: standard 1: long	(°C)	(°C)	(°C)									
SM072A*	76	72+3/-2	100									
SM092A*	97	92+3/-2	200									
SM110A*	115	110±2	125									
SM125A*	131	126+3/-2										
SM137A*	142	137+3/-2										
SM146A*	151	146+3/-2										
SM150A*	150											

Ratings

1) 2)	Rated Functioning Temperature Tf	Operating Temperature	Tm	Electrical Ratings		UL Thailand	CSA Thailand	VDE Thailand	BEAB Thailand	CCC Thailand	KTL Thailand (SU05020 -****)	PSE Thailand (JET1974 -32001 -****)
				AC	DC							
Part Number * : 0/1 0: standard 1: long	(°C)	(°C)	(°C)									
SM092B*	97	92+3/-2	200									
SM110B*	115	110±2	125									
SM125B*	131	126+3/-2										
SM137B*	142	137+3/-2										
SM146B*	151	146+3/-2										
SM150B*	150											

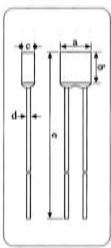
Ratings

1) 2)	Rated Functioning Temperature Tf	Operating Temperature	Tm	Electrical Ratings		UL Thailand	CSA Thailand	VDE Thailand	BEAB Thailand	CCC Thailand	PSE Thailand (JET1974 -32001 -****)	
				AC	DC							
Part Number * : 0/1 0: standard 1: long	(°C)	(°C)	(°C)									
SM110G*	115	110±2	125	0.5A								
SM137G*	142	137+3/-2	200	(Resistive) 5A AC250V	DC50V	E71747	172780 (LR52330)	677802 -1171 -0004	C1169	20020102 05023066	5009 5001 5002	1016 1011 1012
SM146G*	151	146+3/-2										1013
SM150G*	150											

TERMOFUSIBILE Serie A (1A~5A)

Informazioni generali

Il termafusibile di questa serie è dotato di un elemento fusibile. Quando la temperatura sale e raggiunge il punto di fusione dell'elemento fusibile, questi fonde e con l'aiuto del flusso si ritira verso i due terminali creando l'apertura del circuito.



★ RATINGS

➤ A-F

型 号 Model No.	额定动作温度 Rated functioning temp. (Tf)	实测动作温度 Fusing-off temperature	保持温度 Holding temperature (Th)	极限温度 Maximum temp. limit (Tm)	额定电流 Rated current (Ir)	额定电压 Rated voltage (U _r)	安规认证 Safety Approval					RoHS符合品 RoHS Compliance
							UL	CUL	VDE	PSE	CCC	
A1-F	102°C	98±2°C	79°C	203°C	2A	250Vac	●	●	●	●	●	●
A2-F	115°C	112±3°C	92°C	203°C	2A	250Vac	●	●	●	●	●	●
A3-F	125°C	120±3°C	101°C	203°C	2A	250Vac	●	●	●	●	●	●
A4-F	130°C	126±2°C	107°C	203°C	2A	250Vac	●	●	●	●	●	●
A5-F	135°C	131±3°C	112°C	203°C	2A	250Vac	●	●	●	●	●	●
A7-F	138°C	135±2°C	115°C	203°C	2A	250Vac	●	●	●	●	●	●
A8-F	150°C	145±3°C	126°C	203°C	2A	250Vac	●	●	●	●	●	●

Dimension (A-F series) (mm)

a	b	c	d	e
6.2±0.5	6.3±0.5	2.5±0.3	Ø0.54±0.05	70±3

➤ A-3A-F

型 号 Model No.	额定动作温度 Rated functioning temp. (Tf)	实测动作温度 Fusing-off temperature	保持温度 Holding temperature (Th)	极限温度 Maximum temp. limit (Tm)	额定电流 Rated current (Ir)	额定电压 Rated voltage (U _r)	安规认证 Safety Approval					RoHS符合品 RoHS Compliance
							UL	CUL	VDE	PSE	CCC	
A0-3A-F	84°C	82±2°C	40°C	180°C	3A	250Vac	●	●	●	●	●	●
A1-3A-F	102°C	98±2°C	63°C	180°C	3A	250Vac	●	●	●	●	●	●
A2-3A-F	115°C	112±3°C	75°C	180°C	3A	250Vac	●	●	●	●	●	●
A3-3A-F	125°C	120±3°C	85°C	180°C	3A	250Vac	●	●	●	●	●	●
A4-3A-F	130°C	126±2°C	90°C	180°C	3A	250Vac	●	●	●	●	●	●
A5-3A-F	135°C	131±3°C	90°C	180°C	3A	250Vac	●	●	●	●	●	●
A7-3A-F	138°C	135±2°C	93°C	180°C	3A	250Vac	●	●	●	●	●	●
A8-3A-F	150°C	145±3°C	105°C	180°C	3A	250Vac	●	●	●	●	●	●

Dimension (A-3A-F series) (mm)

a	b	c	d	e
6.2±0.5	6.3±0.5	2.5±0.3	Ø0.6±0.02	70±3

➤ A-5A-F

型 号 Model No.	额定动作温度 Rated functioning temp. (Tf)	实测动作温度 Fusing-off temperature	保持温度 Holding temperature (Th)	极限温度 Maximum temp. limit (Tm)	额定电流 Rated current (Ir)	额定电压 Rated voltage (U _r)	安规认证 Safety Approval					RoHS符合品 RoHS Compliance
							UL	CUL	VDE	PSE	CCC	
A0-5A-F	84°C	82±2°C	40°C	180°C	5A	250Vac	●	●	●	●	●	●
A1-5A-F	102°C	98±2°C	63°C	180°C	5A	250Vac	●	●	●	●	●	●
A2-5A-F	115°C	112±3°C	75°C	180°C	5A	250Vac	●	●	●	●	●	●
A3-5A-F	125°C	120±3°C	85°C	180°C	5A	250Vac	●	●	●	●	●	●
A4-5A-F	130°C	126±2°C	90°C	180°C	5A	250Vac	●	●	●	●	●	●
A5-5A-F	135°C	131±3°C	90°C	180°C	5A	250Vac	●	●	●	●	●	●
A7-5A-F	138°C	135±2°C	93°C	180°C	5A	250Vac	●	●	●	●	●	●
A8-5A-F	150°C	145±3°C	105°C	180°C	5A	250Vac	●	●	●	●	●	●

Dimension (A-5A-F series) (mm)

a	b	c	d	e
6.6±0.5	8.0±0.5	2.6±0.3	Ø0.6±0.02	70±3

THERMAL CUTOFFS A Series (1A~5A)

Operating principle

Alloy type thermal cutoff--when ambient temperature of the thermal cutoff rises to its operating temperature, the fusible alloy melts and, due to the surface tension and the coating of special resin compound, liquefied element condenses into bulb-like shape around the end of each lead. Then, the electrical circuit is permanently opened.