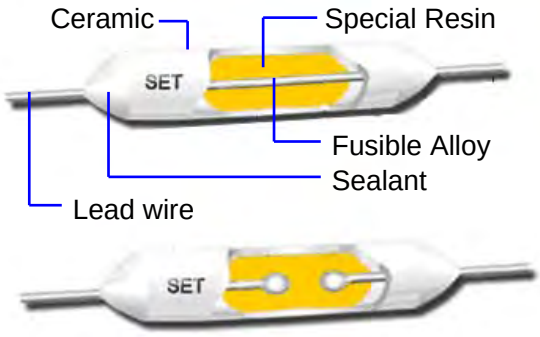
Principle of Thermal cutoff

SET® Alloy thermal cutoffs, defined as non-resettable, are single action devices that are widely used for the electrical equipments against over temperature. The thermal cutoffs are composed of the fusible alloy with low melting point and special resin, encapsulated in a plastic or ceramic housing. Under normal operating, the fusible alloy is joined by the two lead wires within the housing. When the thermal cutoff senses an abnormal heat and reach a preset temperature, the fusible alloy melts and disconnects the circuit completely with the aid of the special resin. Both Axial and Radial shapes are available, with rated current from 1A to 100A, functioning temperature 76C~221C, certificated including UL, CUL, VDE,TUV,PSE, KTL, CCC and ROHS, REACH compliant.

Construction of Thermal cutoff

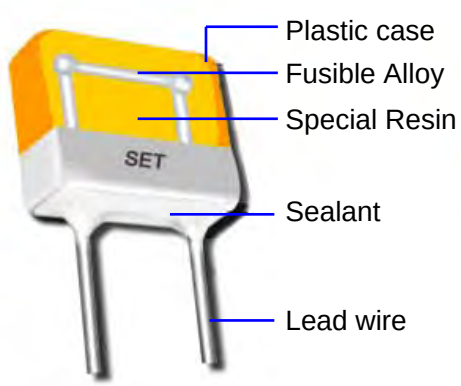
Axial shape

Before Action



After Action

Radial shape



Before Action

After Action

Key Features

- High accuracy of cutoff temperature ±2℃
- Rated current: 1A~100A /250V ac
- Functioning temperature 76℃ ~221℃
- Resin-sealed construction
- Low intrinsic resistance
- Compact size and small size
- Withstand transient surge current up to 5kA~100kA(8/20μs) UL1449 3rd standard

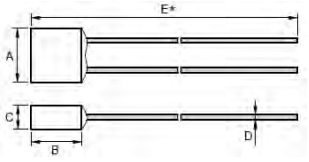
Terminology

- **Thermal-link**: also known as thermal cutoff or thermal fuse, all are the same in this context, function one only, non-resettable.
- **Rated functioning temperature（Tf)**:
  The temperature of the Thermal-link which causes it to change its state of conductivity with a detection current up to 10mA as the only load.
  General tolerance ： +0，-10C （UL，VDE，CSA，IEC）
  PSE tolerance PSE : ±7C (only)
- **Fuse temperature (Fuse-temp)**:
  The temperature is measured with silicone oil bath of which temperature is increased at the rate of 0.5~1C/ min, with a detection current up to 10mA as the only load.
- **Holding temperature (TH)** :
  The Max. temperature at which a TCO will not change its state of conductivity when conducting rated cur rent for 168H.
- **Max. temperature limit (TM)**:
  The Max. temperature at which the TCO can maintain its mechanical and electrical properties without being impaired for for 10 mins.
- **Rated current (Ir):**
  The current used to classify a Thermal-link, which is the Maximum current that thermal cutoffs allow to carry and are able to cutoff the circuit in safety.
- **Rated voltage (Ur)**:
  The voltage used to classify a Thermal-link, which is the Maximum voltage that is allowed to apply to the cir cuit in which the thermal cutoff is used.
- **Transient overload current (Ip):**
  A direct current pulse train which the thermal-link is able to withstand without impairing its characteristics.

Safety Approval

Agency		Country	standard	File NO.	Category
	UL	USA	UL60691	E214712	XCQM2
	CUL	Canada	UL60691	E214712	XCQM8
	TUV	Germany	EN60691	R50161772	
	VDE	Germany	IEC60691	40017055	
	PSE	Japan	J60691	PSE09020139/40/41/42/43/44	
	KTL	Korea	K60691	SU05023-6001/2/3	
	CCC	China	GB9816-2008	2009010205346083	
RoHS	※ RoHS and **REACH** compliant				

• F series 1A

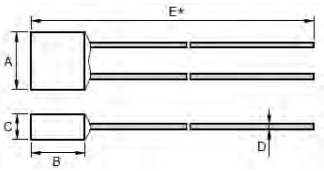


Dimensions (mm)

A	B	C	D	E*
5.2±0.5	4.1±0.5	2.3±0.2	0.50±0.05	60±5

Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm (℃)	Ir (A)	Ur (V)	UL	CUL	PSE	VDE	TUV	CCC	KTL	RoHS
F0	76	73±2	53	200	1	250AC	●	●	●			●		●
F18	86	81±2	61				●	●	●			●		●
F1	102	98±2	79				●	●	●	●	●	●	●	●
F2	115	111±2	91				●	●	●	●	●	●	●	●
F3	125	121±2	100				●	●	●	●	●	●	●	●
F4	130	125±2	106				●	●	●	●	●	●	●	●
F8	133	130±2	111				●	●	●	●		●	●	●
F6	145	140±2	121				●	●	●					●
F7	150	145±2	126				●	●	●	●	●	●	●	●
F16	160	154±2	135						●			●		●
F15	169	164±2	145				●	●	●			●		

• K series 2A

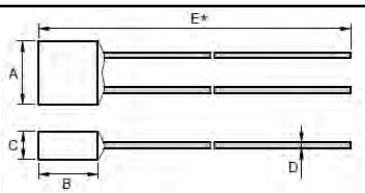


Dimensions （mm）

A	B	C	D	E*
5.8±0.5	5.8±0.5	2.3±0.2	0.54±0.05	70±5

Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm (℃)	Ir (A)	Ur (V)	UL	CUL	PSE	VDE	TUV	CCC	KTL	RoHS
K0	76	73±2	53	200	2	250AC	●	●	●			●		●
K18	86	81±2	61			250AC	●	●	●	●		●	●	●
						60DC	●	●						●
K1	102	98±2	79			250AC	●	●	●	●	●	●	●	●
						60DC	●	●						●
K2	115	111±2	91			250AC	●	●	●	●	●	●	●	●
						60DC	●	●						●
K3	125	121±2	100			250AC	●	●	●	●	●	●	●	●
						60DC	●	●						●
K4	130	125±2	106			250AC	●	●	●	●	●	●	●	●
K8	133	130±2	111				●	●	●	●		●	●	●
K5	135	130±2	111				●	●	●	●		●	●	●
K9	136	131±2	112				●	●	●	●		●	●	●
K6	145	140±2	121				●	●	●	●		●	●	●
K7	150	145±2	126				●	●	●	●	●	●	●	●
K16	160	154±2	135						●			●		●
K15	169	164±2	145				●	●	●			●		
K32	205	199±2	169	250			●	●			●	●		●
K31	221	218±2	188	250			●	●			●	●		●

• X series 3A

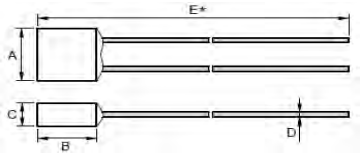


Dimensions （mm）

A	B	C	D	E*
5.8±0.5	5.8±0.5	2.3±0.2	0.54±0.05	70±5

Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm (℃)	Ir (A)	Ur (V)	UL	CUL	PSE	VDE	TUV	CCC	KTL	RoHS
X0	76	73±2	53	200	3	250AC	●	●	●			●		●
X18	86	81±2	61			250AC	●	●	●	●		●	●	●
						60DC	●	●						●
X1	102	98±2	79			250AC	●	●	●	●		●	●	●
						60DC	●	●						●
X2	115	111±2	91			250AC	●	●	●	●		●	●	●
						60DC	●	●						●
X3	125	121±2	100			250AC	●	●	●			●		●
						60DC	●	●						●
X4	130	125±2	106			AC250	●	●	●	●		●	●	●
X8	133	130±2	111				●	●	●	●		●	●	●
X5	135	130±2	111				●	●	●	●		●	●	●
X9	136	131±2	112				●	●	●	●		●	●	●
X6	145	140±2	121				●	●	●	●		●	●	●
X7	150	145±2	126				●	●	●	●		●	●	●
X16	160	154±2	135						●			●		●
X15	169	164±2	145				●	●	●			●		
X32	205	199±2	169	250			●	●			●	●	●	●
X31	221	218±2	188	250			●	●			●	●	●	●

• Y series 5A

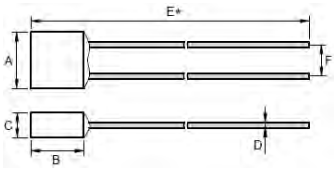


Dimensions （mm）

A	B	C	D	E*
6.6±0.5	7.0±0.5	2.7±0.3	0.80±0.05	70±5

Model NO.	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm (℃)	Ir (A)	Ur (V)	*Imax 8/20us (1 Time)	UL	CUL	PSE	VDE	CCC	KTL	RoHS
Y0	76	73±2	53	200	5	AC250	5KA	●	●	●		●		●
Y18	86	81±2	61					●	●	●		●		●
Y1	102	98±2	77				6KA	●	●	●		●		●
Y2	115	111±2	89					●	●	●	●	●	●	●
Y3	125	121±2	98					●	●	●	●	●	●	●
Y4	130	125±2	103					●	●	●	●	●	●	●
Y8	133	130±2	108					●	●	●	●	●	●	●
Y9	136	131±2	111					●	●	●	●	●	●	●
Y6	145	140±2	118					●	●	●				●
Y7	150	145±2	123					●	●	●	●	●	●	●
Y16	160	154±2	133							●		●		●
Y15	169	164±2	142					●	●	●		●		

• S&T series 10A&15A

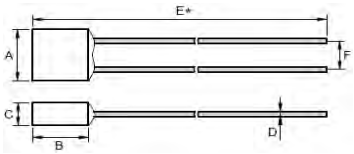


Dimensions (mm)

A	B	C	D	E*	F*
8.3±0.5	7.5±0.5	3.4±0.2	1.05±0.05	45±5	5.2±0.5

Model NO.	Tf (℃)	Fuse-Temp (℃)	TH (℃)	TM (℃)	Ir (A)	Ur (V)	*In 8/20us (15Times)	*Imax 8/20us (1 Time)	UL	CUL	VDE	CCC	PSE	RoHS
S102	102	98±2	72	200	10	250AC	5KA	10KA	●	●	●	●	●	●
S115	115	111±2	85						●	●	●	●	●	●
S136	136	131±2	106						●	●	●	●	●	●
T102	102	98±2	72	200	15/16	250AC	6KA	12KA	●	●	●	●	●	●
T115	115	111±2	85						●	●	●	●	●	●
T136	136	131±2	106						●	●	●	●	●	●

• P&Q series 20A&25A



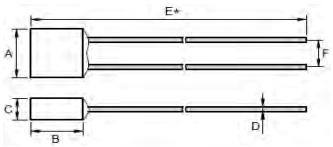
Dimensions (mm)

A	B	C	D	E*	F*
10.8±0.5	11.5±0.5	4.8±0.2	1.6±0.05	50±5	6.6±0.5

Model NO.	Tf (℃)	Fuse-Temp (℃)	TH (℃)	TM (℃)	Ir (A)	Ur (V)	*In 8/20us (15Times)	*Imax 8/20us (1 Time)	UL	CUL	ROHS
P115	115	111±2	82	200	20	250AC	15KA	25KA	●	●	●
P136	136	131±2	102						●	●	●
Q115	115	111±2	82	200	25	250AC	20KA	30KA	●	●	●
Q136	136	131±2	102						●	●	●

SD,TD,PD,QD Series

• SD&TD Series 10A&15/16A



Dimensions (mm)

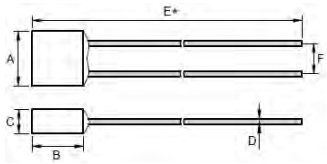
Series	A	B	C	D	E*	F*
SD/TD	8.6±0.5	7.5±0.5	3.6±0.2	1.05±0.05	45±5	5.2±0.5

Model NO.	Tf (℃)	Fuse-Temp (℃)	TH (℃)	TM (℃)	Ir (A)	Ur (V)	RoHS
SD102	102	98±2	72	160	10	125DC	●
SD115	115	111±2	85				●
SD125	125	121±2	95				●
SD130	130	125±2	100				●
SD136	136	131±2	106				●
SD150	150	145±2	120				●
TD102	102	98±2	72	160	15/16	125DC	●
TD115	115	111±2	85				●
TD125	125	121±2	95				●
TD130	130	125±2	100				●
TD136	136	131±2	105				●
TD150	150	145±2	120				●

Standard Ratings

Thermal cutoffs (TCO)

● **PD& QD Series 20A&25A**

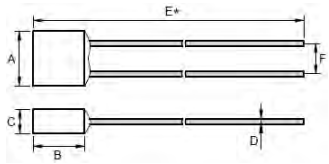


Dimensions (mm)

Series	A	B	C	D	E*	F*
PD/QD	10.7±0.5	11.8±0.5	4.8±0.2	1.6±0.05	50±5	6.6±0.5

Model NO.	Tf (℃)	Fuse-Temp (℃)	TH (℃)	TM (℃)	Ir (A)	Ur (V)	RoHS
PD102	102	98±2	66	160	20	125DC	●
PD115	115	111±2	82				●
PD125	125	121±2	90				●
PD130	130	125±2	97				●
PD136	136	131±2	102				●
PD150	150	145±2	117				●
QD102	102	98±2	66	160	25	125DC	●
QD115	115	111±2	82				●
QD125	125	121±2	90				●
QD130	130	125±2	97				●
QD136	136	131±2	102				●
QD150	150	145±2	117				●

● **N & G Series 40A&60A**

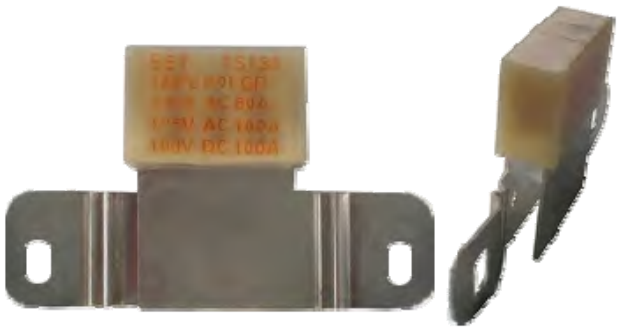


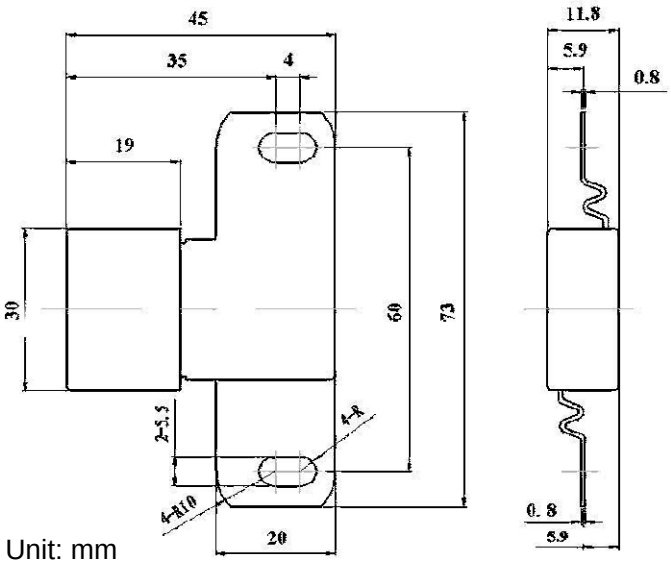
Dimensions (mm)

Series	A	B	C	D	E*	F*
N	11.5.0±1.0	13±1.0	5.0±0.8	2.0±0.5	50±5	6.6±0.5
G	13.8±1.0	15.5±2.0	5.7±0.8	2.2±0.5	50±5	9.0±0.5

Model	Tf (℃)	Fuse-Temp (℃)	TH (℃)	TM (℃)	*In 8/20us (15Times)	*Imax 8/20us (1 Time)	Ir (A)	Ur (VAC)	RoHS
N102	102	99±2	65	160	20KA	40KA	30	250	●
N115	115	112±2	78	160	20KA	40KA	30	250	●
N125	125	122±2	90	160	20KA	40KA	30	250	●
N130	130	126±2	96	160	20KA	40KA	30	250	●
N136	136	132±2	102	160	20KA	40KA	30	250	●
N150	150	146±2	116	160	20KA	40KA	30	250	●
G102	102	99±2	61	160	30KA	60KA	40	250	●
G115	115	112±2	74	160	30KA	60KA	40	250	●
G125	125	122±2	84	160	30KA	60KA	40	250	●
G130	130	126±2	88	160	30KA	60KA	40	250	●
G136	136	132±2	94	160	30KA	60KA	40	250	●
G150	150	146±2	108	160	30KA	60KA	40	250	●

- **TS series 100A**



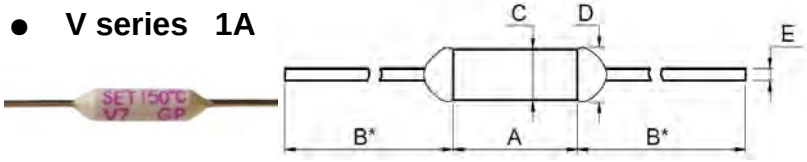


Unit: mm

Model	Tf (℃)	Fuse-Temp (℃)	TH (℃)	TM (℃)	*Imax 8/20us (1 Time)	Ir (A)	Ur (V)	RoHS
TS102	102	99±2	61	180	100KA	80	250(AC)	●
						100	125(AC)	●
						100	100(DC)	●
TS115	115	112±2	74	180	100KA	80	250(AC)	●
						100	125(AC)	●
						100	100(DC)	●
TS123	123	118±2	82	180	100KA	80	250(AC)	●
						100	125(AC)	●
						100	100(DC)	●
TS125	125	122±2	84	180	100KA	80	250(AC)	●
						100	125(AC)	●
						100	100(DC)	●
TS130	130	126±2	88	180	100KA	80	250(AC)	●
						100	125(AC)	●
						100	100(DC)	●
TS136	136	132±2	94	180	100KA	80	250(AC)	●
						100	125(AC)	●
						100	100(DC)	●
TS150	150	146±2	108	180	100KA	80	250(AC)	●
						100	125(AC)	●
						100	100(DC)	●

Note: 1. Surge current(8/20us) is defined according to UL1449 3rd standard.
2. The shape of connecting pole should be customized as required.

- **V series 1A**



Dimensions mm

A	B	C	D	E
6.5±0.5	37±5	2.1±0.5	≤2. 6	0.5±0.05

Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm(℃)	Ir(A)	Ur(V)	UL	CUL	TUV	PSE	CCC	KTL	RoHS
V0	76	73±2	53	200	1	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
V18	86	81±2	61	200	1	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
V21	97	93±2	70	200	1	125AC	●	●					●
						50DC	●	●					●
V1	102	98±2	79	200	1	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
V2	115	111±2	91	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V3	125	121±2	100	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V4	130	125±2	106	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V8	133	130±2	111	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V5	135	130±2	111	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V9	136	131±2	112	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V13	139	135±2	115	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V6	145	140±2	121	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V7	150	145±2	126	200	1	250AC	●	●	●	●	●	●	●
						50DC	●	●					●

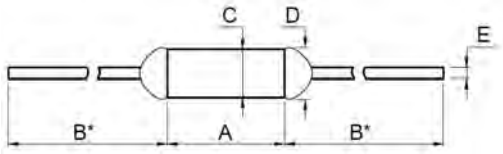
Note: other temperatures can be customized, such as: **85℃, 90℃, 92℃, 95℃,, 100℃, 103℃, 108℃, 117℃, 120℃, 127℃,** and etc. For more choices, welcome contact us for help.

*The length of learwires can be customized as required.

Standard Ratings

Thermal cutoffs (TCO)

● **H series 2A**



Dimensions mm

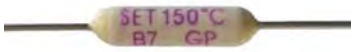
A	B	C	D	E*
9±0.5	36±5	2.5±0.5	≤3.0	0.54±0.05

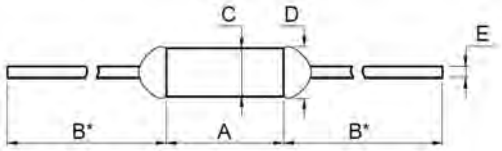
Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm(℃)	Ir(A)	Ur(V)	UL	CUL	TUV	PSE	CCC	KTL	RoHS
H0	76	73±2	53	200	2	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
H18	86	81±2	61	200	2	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
H21	97	93±2	70	200	2	125AC	●	●					●
						50DC	●	●					●
H1	102	98±2	79	200	2	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
H2	115	111±2	91	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
H3	125	121±2	100	200	2	250AC	●	●	●	●	●	●	●
						60DC	●	●					●
H4	130	125±2	106	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
H8	133	130±2	111	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
H5	135	130±2	111	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
H9	136	131±2	112	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
H13	139	135±2	115	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
H6	145	140±2	121	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
H7	150	145±2	126	200	2	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
V32/H32	205	199±2	169	250	1 / 2	250AC			●		●	●	●
						125AC	●	●					●
						60DC	●	●	●		●	●	●
V31/H31	221	218±2	188	250	1 / 2	250AC			●		●	●	●
						125AC	●	●					●
						60DC	●	●	●		●	●	●

Note: other temperatures can be customized, such as: **85℃, 90℃, 92℃, 95℃, 100℃, 103℃, 108℃, 117℃, 120℃, 127℃,** and etc. For more choices, welcome contact us for help.

*The length of learwires can be customized as required.

● **B series 3A**





Dimensions mm

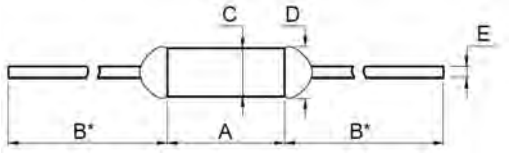
A	B	C	D	E
10±0.5	35±5	3.0±0.5	≤3.5	0.54±0.05

Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm(℃)	Ir(A)	Ur(V)	UL	CUL	TUV	PSE	CCC	KTL	RoHS
B0	76	73±2	53	200	3	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
B18	86	81±2	61	200	3	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
B21	97	93±2	70	200	3	125AC	●	●					●
						50DC	●	●					●
B1	102	98±2	79	200	3	250AC			●	●	●	●	●
						125AC	●	●					●
						50DC	●	●					●
B2	115	111±2	91	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B3	125	121±2	100	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B4	130	125±2	106	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B8	133	130±2	111	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B5	135	130±2	111	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B9	136	131±2	112	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B13	139	135±2	115	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B6	145	140±2	121	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●					●
B7	150	145±2	126	200	3	250AC	●	●	●	●	●	●	●
						50DC	●	●	●	●	●	●	●
B32	205	199±2	169	250	3	125AC	●	●	●		●	●	●
						60DC	●	●	●		●	●	●
B31	221	218±2	188	250	3	125AC	●	●	●		●	●	●
						60DC	●	●	●		●	●	●

Note: other temperatures can be customized, such as: **85℃, 90℃, 92℃, 95℃, 100℃, 103℃, 108℃, 117℃, 120℃, 127℃,** and etc. For more choices, welcome contact us for help.

*The length of learwires can be customized as required.

● **C series 5A**



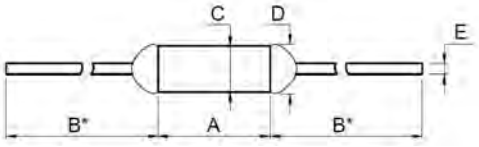
Dimensions mm

A	B	C	D	E
11.5±0.5	35±5	3.3±0.5	≤3.8	0.8±0.05

Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm(℃)	Ir(A)	Ur(V)	*Imax 8/20us (1 Time)	UL	CUL	TUV	PSE	CCC	KTL	RoHS
C0	76	73±2	53	200	5	250AC	5KA			●	●	●	●	●
C18	86	81±2	61	200	5	250AC				●	●	●	●	●
						125AC		●	●					●
						50DC		●	●					●
C21	97	93±2	70	200	5	125AC		●	●					●
						50DC		●	●					●
C1	102	98±2	77	200	5	250AC	6KA			●	●	●	●	●
						125AC		●	●					●
						50DC		●	●					●
C2	115	111±2	89	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C3	125	121±2	98	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C4	130	125±2	103	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C8	133	130±2	108	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C5	135	130±2	108	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C9	136	131±2	111	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C13	139	135±2	112	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C6	145	140±2	118	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C7	150	145±2	123	200	5	250AC		●	●	●	●	●	●	●
					7	50DC		●	●					●
C32	205	199±2	167	250	5	125AC		●	●	●		●	●	●
						60DC		●	●	●		●	●	●
C31	221	218±2	186	250	5	125AC		●	●	●		●	●	●
						60DC		●	●	●		●	●	●

Note: other temperatures can be customized, such as: **85℃, 90℃, 92℃, 95℃, 100℃, 103℃, 108℃, 117℃, 120℃, 127℃,** and etc. For more choices, welcome contact us for help.
The length of learwires can be customized as required.

U series 10A



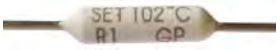
Dimensions (mm)

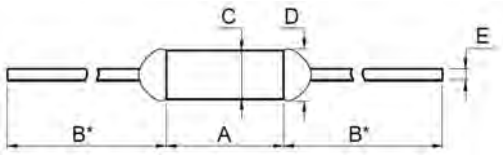
Series	A	B	C	D	E
U	14.0±0.5	34±5	4.0±0.5	≤4.5	1.05±0.05

Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm(℃)	Ir(A)	Ur (V)	*Imax 8/20us (1 Time) 最大浪涌	CCC	TUV	ROHS
U0	76	73±2	43	200	10	250AC	8KA	●	●	●
						60DC		●	●	●
U18	86	81±2	51	200	10	250AC		●	●	●
						60DC		●	●	●
U1	102	98±2	72	200	10	250AC	10KA	●	●	●
						60DC		●	●	●
U2	115	111±2	85	200	10	250AC		●	●	●
						60DC		●	●	●
U3	125	121±2	95	200	10	250AC		●	●	●
						60DC		●	●	●
U4	130	125±2	100	200	10	250AC		●	●	●
						60DC		●	●	●
U5	135	130±2	105	200	10	250AC		●	●	●
						60DC		●	●	●
U6	145	140±2	115	200	10	250AC		●	●	●
						60DC		●	●	●
U7	150	145±2	120	200	10	250AC		●	●	●
						60DC		●	●	●
U16	160	155±2	130	200	10	250AC		●	●	●
						60DC		●	●	●
U32	205	199±2	167	250	10	250AC		●	●	●
						60DC		●	●	●
U31	221	218±2	186	250	10	250AC		●	●	●
						60DC		●	●	●

Note: other temperatures can be customized, such as: **85℃, 90℃, 92℃, 95℃, 100℃, 103℃, 108℃, 117℃, 120℃, 127℃,** and etc. For more choices, welcome contact us for help.
The length of learwires can be customized as required.

R series 15A





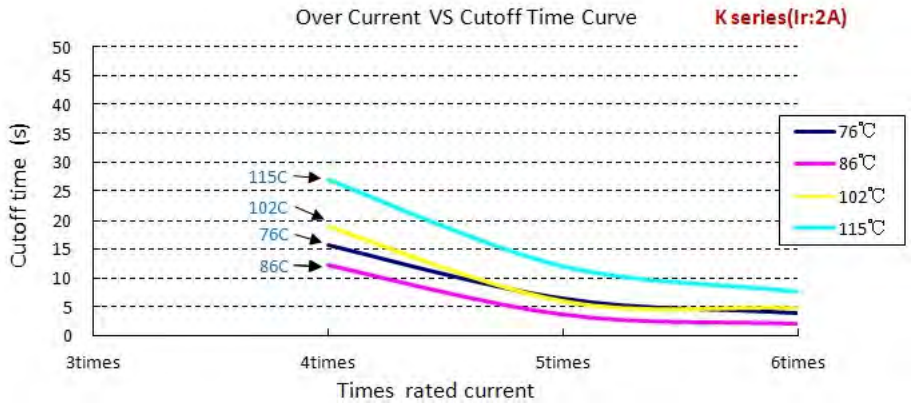
Dimensions (mm)

Series	A	B	C	D	E
R	14.0±0.5	34±5	4.0±0.5	≤4.5	1.2±0.05

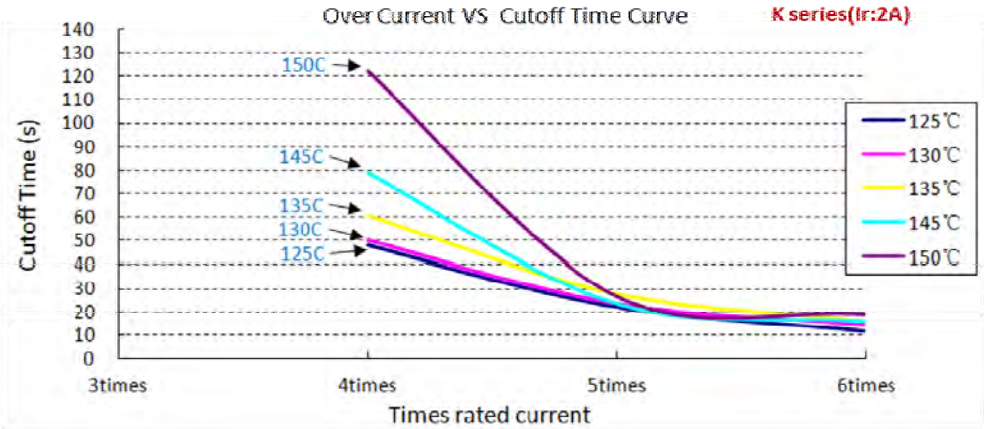
Model	Tf (℃)	Fuse-Temp (℃)	Th(℃)	Tm(℃)	Ir(A)	Ur (V)	*Imax 8/20us (1 Time) 最大浪涌	CCC	TUV	ROHS
R0	76	73±2	43	200	15	250AC	12KA	●	●	●
						60DC		●	●	●
R18	86	81±2	51	200	15	250AC		●	●	●
						60DC		●	●	●
R1	102	98±2	72	200	15	250AC	15KA	●	●	●
						60DC		●	●	●
R2	115	111±2	85	200	15	250AC		●	●	●
						60DC		●	●	●
R3	125	121±2	95	200	15	250AC		●	●	●
						60DC		●	●	●
R4	130	125±2	100	200	15	250AC		●	●	●
						60DC		●	●	●
R5	135	130±2	105	200	15	250AC		●	●	●
						60DC		●	●	●
R6	145	140±2	115	200	15	250AC		●	●	●
						60DC		●	●	●
R7	150	145±2	120	200	15	250AC		●	●	●
						60DC		●	●	●
R16	160	155±2	130	200	15	250AC		●	●	●
						60DC		●	●	●
R32	205	199±2	167	250	15	250AC		●	●	●
						60DC		●	●	●
R31	221	218±2	186	250	15	250AC		●	●	●
						60DC		●	●	●

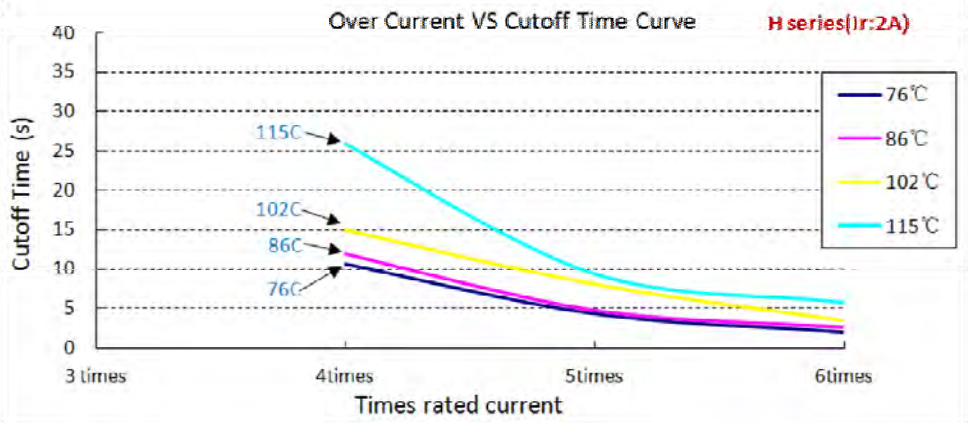
Note: other temperatures can be customized, such as: **85℃, 90℃, 92℃, 95℃, 100℃, 103℃, 108℃, 117℃, 120℃, 127℃,** and etc. For more choices, welcome contact us for help.
The length of learwires can be customized as required.

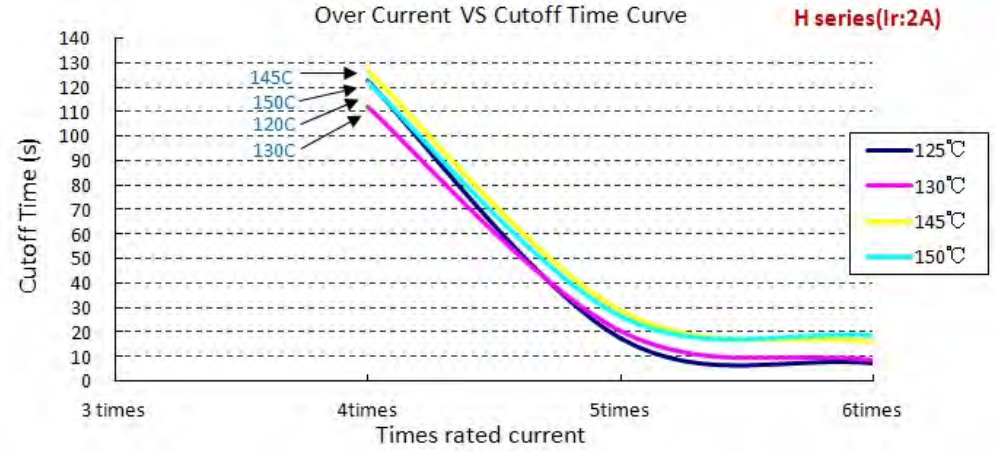
Performance Curves1



Important note:
This is an illustrated curve , Please contact us for confirmative technical data& curve.





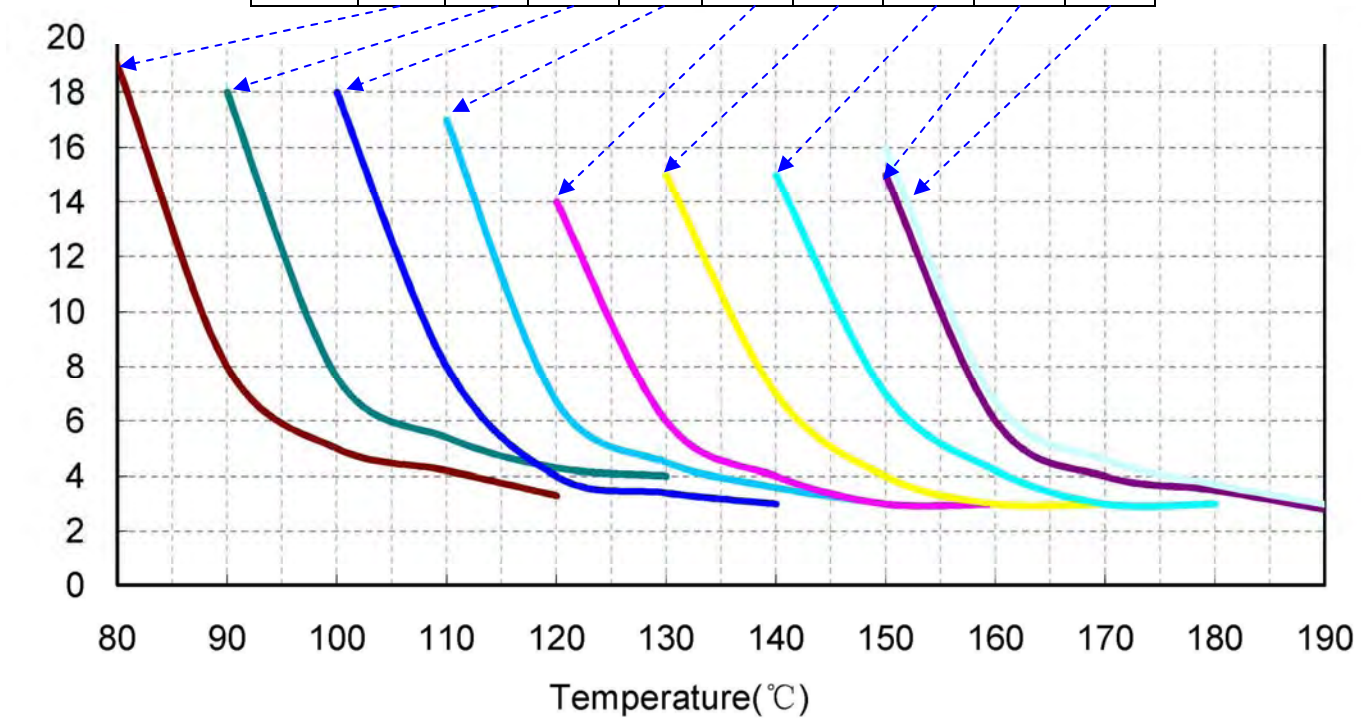


Important note:
This is an illustrated curve , Please contact us for confirmative technical data& curve.

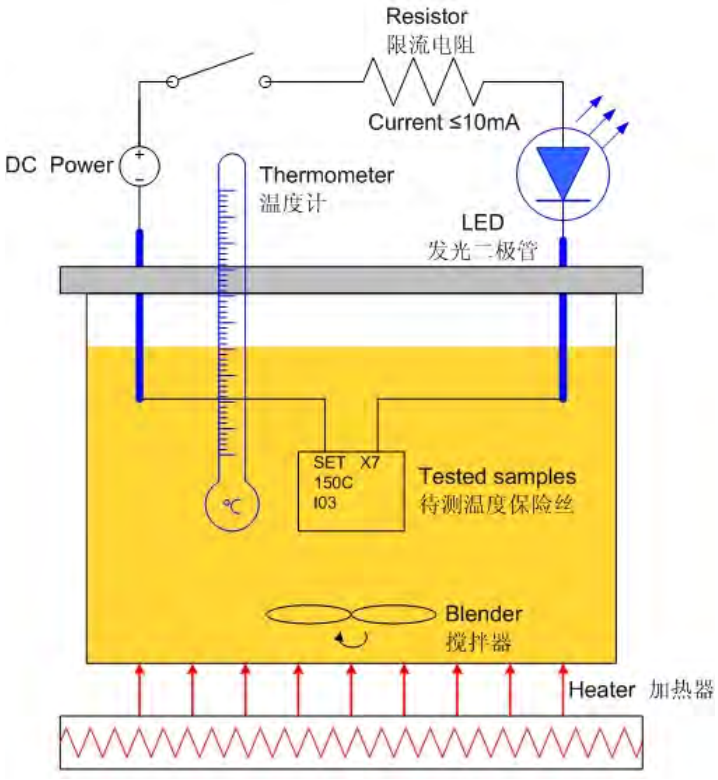
Performance Curves2

Temperature VS Cutoff Tim

Model	Y0	Y18	Y1	Y2	Y3	Y4	Y5	Y6	Y7
TF(C)	76	86	102	115	125	130	135	145	150



Tested diagram



Important note:
This is an illustrated curve , Please contact us for confirmative technical data& curve.

Safety Precautions

【1】Each thermal-link has specific Electrical and Temperature Rating and must be used with in the pre-scribed ratings. These ratings include Tf (Rated Functioning Temperature), Th or Tc (Holding Temperature), Tm (Maximum Temperature Limit), and the electrical ratings. Please see the technical data sheet.

【2】For reason of safety that a thermal-link is a non-repairable item and that, in case of replacement an equivalent thermal-link with the same catalogue number shall be used, mounted in exactly the same way.

【3】Install thermal-links so that their temperatures do not continuously exceed the Holding Temperature specified in the individual specification.

【4】The end product should be designed so that thermal-link detects only intended heat source (radiant, convection, and /or conductance).For example, in a heater application, thermal-link should not be heated through lead wire which will accelerate the fusing off of the thermal-link, In case of a transformer or motor application, where the temperature should be controlled in a transformer or motor coil, and thermal-link should have good heat conductive contact with the transformer or motor coil.

【5】It is recommended that using the dummy thermal-link having an internal thermocouple to select the proper temperature rating and location of the thermal-link.

【6】Do not locate the thermal-link on an assembly subjected to severe continuous vibration.

【7】The end product should be tested to ensure that potentially abnormal conditions do not exposed the thermal-link to the temperature exceeding its Tm.

【8】The seal or body must not be damaged, burned or over heated.

【9】Mounting design of the thermal-links

9.1 Mount the thermal-link at the location where temperature rises evenly.

9.2 Design the lead wire as long as possible and connect it in the way that tension or pressed torsion is not applied to the wire.

Safety Precautions

【10】Lead wire bending

10.1 If the lead has to be used by bending it, bend it at approx 3mm in minimum away from the molded section.

10.2 Use radio pinchers to bend the wire as shown in Fig.1 and not to damage the molded section of the case and the lead wire.

10.3 Leads should not be cut, nicked, bended sharply, fractured or burned during forming or installation.

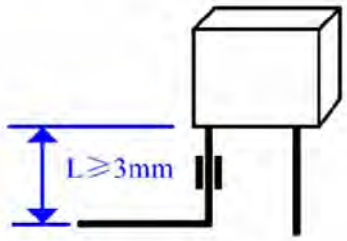


Figure 1

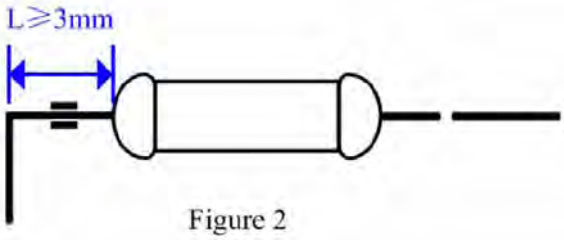


Figure 2

10.4 Tangential forces on the leads must be avoided (i.e. pushing or pulling on the leads at angle to thermal -link body) as such forces may damage the seal of thermal-links.

【11】The seal or body must not be damaged, burned or over heated.

【12】Stress due to expansion and contraction of parts attached to the leads or body, vibration or other movements of parts should be considered when designing the end product. A flexible or bent heater lead or a cold, low resistance heater lead should be used to connect to thermal-link.

【13】Resistance of connections should be monitored to ensure minimal resistance. Improper connections or secure may result in premature failure of the thermal-link. Samples of joints should be inspected to ensure adequate mechanical bonding of lead to connection wires. Improper connections can cause damage to the seal or other parts which may result in shorting or nuisance tripping of the devices due to the generation of excessive heat at a faulty high resistance junction.

【14】Splices and terminations

14.1 If it is necessary to bare the lead of wire, there shall be an arrangement that prevents deflection or damage of the thermal-link wires.

14.2 Terminals or clamps should be of corrosion resistance materials.

14.3 Appropriate free lengths of wire and sufficiently flexible wire connections should be used. Thermal-links and splices should be secured to prevent vibration or flexing of thermal-links and splices during normal operation.

Safety Precautions

【15】Soldering of leads

15.1 Soldering should be carried out within the soldering conditions listed in table 1.

15.2 Because the thermal element of thermal-link is a fusible alloy which connected with lead wires, improper soldering operation (too high soldering temperature, too long soldering time, too short lead wire used etc.) will cause thermal element damaged by the excessive heat transmit from the lead wire which may result in premature opening of thermal-link.

15.3 When soldering is required under severe conditions listed other than specified table 1, use a heat sink on thermal-link lead wire between solder joint and thermal-link body.

15.4 Perform the soldering operation carefully so that the pull/push and twist tensions are not applied to thermal-link body and lead wire.

15.5 After soldering leave it for natural cooling for longer than 20 sec. During this cooling time, never move the thermal-link body and lead wire.

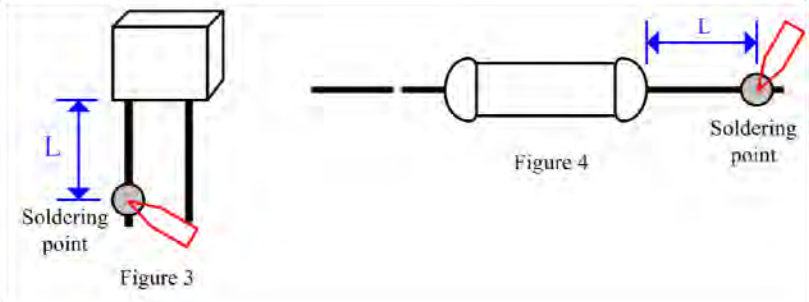
【16】Location of thermal-link with regard to wet application

If thermal-link is applied to coffeepot, hot-water heater, dryer, hygrostat, etc., locate the thermal-link at the position where thermal-link is protected from breakage by spilling water or other liquid and from damage by high humidity.

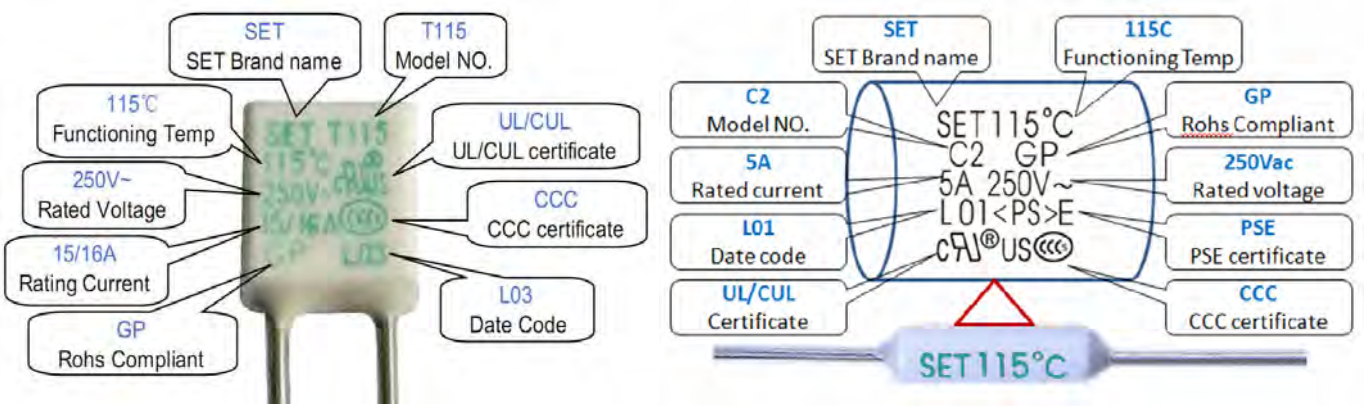
【17】After Installation, the end construction shall comply with the appliance standard.

Table 1.soldering time (Sec)

Function temperature Tf ℃	Max allowable soldering time (s)			Solder temperature
	Length of Lead wire (L)			
	10mm	20mm	30mm	
102~115	1*	2	3	400℃
116~135	1*	3	5	
136~150	3	5	5	
151~221	4	6	7	
*Need to add auxiliary heat conduction for not damage the thermal fuse unexpectedly.				



Marking



Standard Packing information

	Model	Ir (A)	Length of Lead wire (mm)	QTY (PC)	Gross Weight (Kg)	Size of Carton (cm)
Radial 	F	1	69	50,000	18	44x30x26
	K	2	69	50,000	20	
	X	3	69	50,000	21	
	Y	5	69	30,000	24.5	
	S	10	45	25,000	26.5	
	T	15	45	25,000	26.5	
	P	20	50	9,000	25.5	
	Q	25	50	9,000	26	
	N	30	50	4,500	20	
	G	40	50	4,500	24.5	
Axial 	V	1	37	50,000	11.5	
	H	2	36	50,000	15.5	
	B	3	53	50,000	22.5	
	C	5	38	30,000	19.5	
	U	10	38	15,000	17.5	
	R	15	38	15,000	17.5	

Customized Service

Insulation sleeve

Lead wire Cutting

Lead wire Bending