

## FEATURE

- Radial led devices.
- Cured, flame retardant epoxy polymer insulating material meets UL94 V-0 requirements.
- Available in lead-free version.



## APPLICATIONS

- USB hubs, ports and peripherals
- Computers & peripherals
- Motor protection
- General electronics
- Automotive applications

## PACKAGE DIMENSIONS

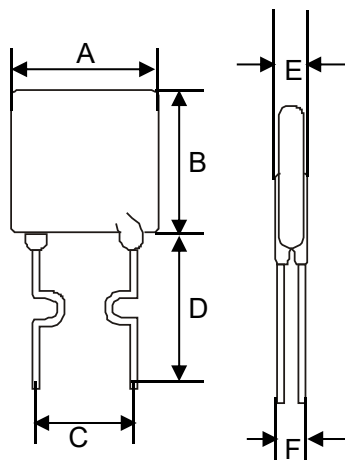


FIG 1

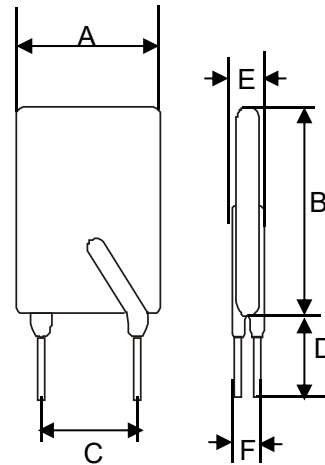


FIG 2

Part Number	FIG	A(max)	B(max)	C(max)	D(min)	E(max)	F(typ)
SB30-090	1	7.40	12.2	5.10	7.6	3.0	0.9
SB30-110	1	7.40	12.2	5.10	7.6	3.0	0.9
SB30-135	1	9.20	13.5	5.10	7.6	3.0	0.9
SB30-160	1	9.20	15.2	5.10	7.6	3.0	0.9
SB30-185	1	9.20	15.2	5.10	7.6	3.0	0.9
SB30-200	1	15.2	15.2	5.10	7.6	3.1	0.9
SB30-250	1	13.2	18.3	5.10	7.6	3.0	0.9
SB30-300	2	13.2	17.3	5.10	7.6	3.0	1.2
SB30-400	2	14.0	20.1	5.10	7.6	3.0	1.2

Part Number	FIG	A(max)	B(max)	C(max)	D(min)	E(max)	F(typ)
SB30-500	2	14.0	20.1	10.2	7.6	3.0	1.2
SB30-600	2	17.2	24.9	10.2	7.6	3.0	1.2
SB30-700	2	17.2	24.9	10.2	7.6	3.0	1.2
SB30-800	2	23.5	29.2	10.2	7.6	3.0	1.2
SB30-900	2	23.5	29.2	10.2	7.6	3.0	1.2

## ELECTRICAL CHARACTERISTICS

Part Number	V <sub>max</sub> (V)	I <sub>max</sub> (A)	I <sub>h</sub> (A)	R <sub>max</sub> (Ω)	R <sub>min</sub> (Ω)	Pd(W)
SB30-090	30	40	0.90	0.22	0.130	0.60
SB30-110	30	40	1.10	0.20	0.090	0.70
SB30-135	30	40	1.35	0.16	0.070	0.80
SB30-160	30	40	1.60	0.14	0.060	0.90
SB30-185	30	40	1.85	0.12	0.050	1.00
SB30-200	30	40	2.00	0.10	0.040	1.20
SB30-250	30	40	2.50	0.08	0.030	1.20
SB30-300	30	40	3.00	0.07	0.030	2.00
SB30-400	30	40	4.00	0.06	0.020	2.50
SB30-500	30	40	5.00	0.05	0.015	3.00
SB30-600	30	40	6.00	0.04	0.005	3.50
SB30-700	30	40	7.00	0.03	0.005	3.80
SB30-800	30	40	8.00	0.025	0.005	4.00
SB30-900	30	40	9.00	0.02	0.005	4.20

V<sub>MAX</sub>=Maximum voltage device can withstand without damage at rated current.

I<sub>MAX</sub>=Maximum fault current device can withstand without damage at rated voltage.

I<sub>H</sub>=Hold current: maximum current at which the device will not trip at 25 still air.

R<sub>MAX</sub>=Maximum device resistance at 25 prior to tripping.

R<sub>MIN</sub>=Minimum device resistance at 25 prior to tripping.

Pd<sub>typ</sub>=Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

## THERMAL DERATING CHART - I<sub>H</sub>(A)

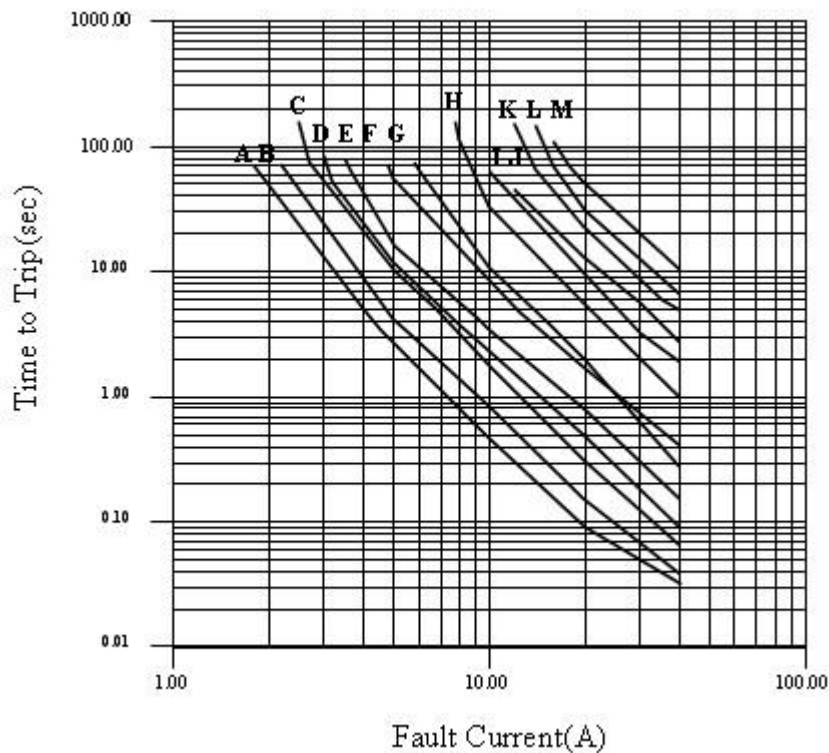
Part Number	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
SB30 -090	1.17	1.04	0.90	0.75	0.69	0.61	0.55	0.47
SB30 -110	1.43	1.27	1.10	0.91	0.85	0.75	0.67	0.57
SB30-135	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.70

Part Number	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SB30-160	2.08	1.84	1.60	1.33	1.23	1.09	0.98	0.83
SB30-185	2.41	2.13	1.85	1.54	1.42	1.26	1.13	0.96
SB30-200	2.60	2.30	2.00	1.66	1.54	1.36	1.22	1.04
SB30-250	3.25	2.88	2.50	2.08	1.93	1.70	1.53	1.30
SB30-300	3.90	3.45	3.00	2.49	2.31	2.04	1.83	1.56
SB30-400	5.20	4.6	4.00	3.32	3.08	2.72	2.44	2.08
SB30-500	6.5	5.75	5.00	4.15	3.85	3.40	3.05	2.60
SB30-600	7.80	6.90	6.00	4.98	4.62	4.08	3.66	3.12
SB30-700	9.10	8.05	7.00	5.81	5.39	4.76	4.27	3.64
SB30-800	10.4	9.20	8.00	6.64	6.16	5.44	4.88	4.16
SB30-900	11.70	10.35	9.00	7.47	6.93	6.12	5.49	4.68

### TEST PROCEDURES AND REQUIREMENT

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	5times, I hold, $V_{max}$ , 25°C	$T \leq \max.$ Time to trip(seconds)
Hold Current	1H, AT I hold, 25°C	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100 cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 48hours	No arcing or burning

### TYPICAL TIME-TO-TRIP CHARTS @ 25°C

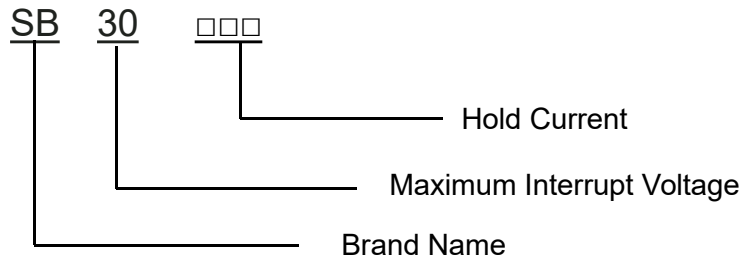


- A = SB 30-090
- B = SB 30-110
- C = SB 30-135
- D = SB 30-160
- E = SB 30-185
- F = SB 30-250
- G = SB 30-300
- H = SB 30-400
- I = SB 30-500
- J = SB 30-600
- K = SB 30-700
- L = SB 30-800
- M = SB 30-900

## STORAGE RECOMMENDATIONS

- Storage Temperature : -10 °C ~+40 °C
- Relative Humidity :80%RH
- Keep away from corrosive atmosphere and sunlight.
- Period of Storage: 1 year

## ORDERING INFORMATION



## PACKAGING

Part Number	Quantity
SB 30-xxx	1000/500