FEATURES

- I(hold): 0.5~9.0A
- RoHS compliant, Lead-Free
- Fast time-to-trip
- Bulk packaging,or tape and reel available
- Low resistance
- Radial leaded device

APPLICATIONS

- PC motherboard - plug and play protection
- Industrial controls
- Automotive electronics
- Medical products
- Power ports

ENVIRONMENTAL SPECIFICATIONS

Test	Conditions	Resistance change
Passive aging	+85°C,1000 hrs	±8% typica
Humidity aging	+85°C，85%R.H.,168 hours	±8% typical
Thermal shock	+125°C to -55°C，10times	±12% typical
Resistance to solvent	MIL-STD-202，Method 215	No change
Vibration	MIL-STD-202，Method 201	No change
Ambient operating conditions : - 40°C to +85°C Maximum surface temperature of the device in the tripped state is 125 °C		

PERFORMANCE SPECIFICATION

Type Number	I_{hold}	I_{trip}	V_{max}	I_{max}	$P_{d\ typ}$	Max. Time to Trip		Ri_{min}	Ri_{max}
	A	A	V_{DC}	A	W	Current A	Tmax S	mΩ	mΩ
SK30-050	0.5	1.0	30	40	0.5	2.5	5	250	600
SK30-075	0.75	1.5	30	40	0.6	3.75	5	200	370
SK30-090	0.90	1.80	30	40	0.7	4.50	8	100	220
SK30-110	1.10	2.20	30	40	0.7	5.50	8	70	200
SK30-120	1.20	2.40	30	40	0.8	6.00	8	80	180
SK30-135	1.35	2.70	30	40	0.8	6.75	8	70	160
SK30-160	1.60	3.20	30	40	0.9	8.00	8	60	140
SK30-185	1.85	3.70	30	40	1.0	9.25	8	50	120
SK30-200	2.00	4.00	30	40	1.2	10.00	11	40	100
SK30-250	2.50	5.00	30	40	1.2	12.50	11	30	80
SK30-300	3.00	6.00	30	40	2.0	15.00	11	30	70
SK30-400	4.00	8.00	30	40	2.5	20.00	12.7	10	60
SK30-500	5.00	10.00	30	40	3.0	25.00	14.5	10	50
SK30-600	6.00	12.00	30	40	3.5	30.00	16.0	5	40
SK30-700	7.00	14.00	30	40	3.8	35.00	17.5	5	30
SK30-800	8.00	16.00	30	40	4.0	40.00	18.8	5	25
SK30-900	9.00	18.00	30	40	4.2	40.00	20.0	5	20

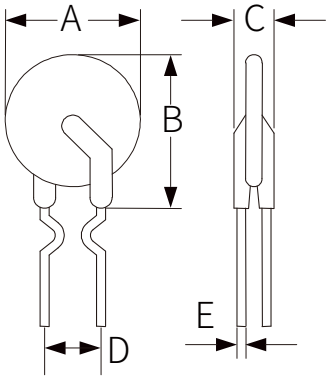
V_{max}= Maximum operating voltage device can withstand without damage at rated current (Imax).
I_{max}= Maximum fault current device can withstand without damage at rated voltage (V max).
I_{hold}= Hold Current. Maximum current device will not trip in 25°C still air.
I_{trip}= Trip Current. Minimum current at which the device will always trip in 25°C still air.
P_d= Power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.
$Ri_{min/max}$=Minimum/Maximum device resistance prior to tripping at 25°C.
$R1_{max}$=Maximum device resistance is measured one hour post reflow.

THERMAL DERATING CHART-IH(A)

Part Number	Ambient Operation Temperature								
	-40 °C	-20 °C	0 °C	25 °C	40 °C	50 °C	60 °C	70 °C	85 °C
SK30-050	0.72	0.65	0.57	0.5	0.45	0.41	0.38	0.34	0.25
SK30-075	1.08	0.97	0.86	0.75	0.68	0.62	0.57	0.671	0.37
SK30-090	1.400	1.170	1.035	0.90	0.747	0.693	0.612	0.549	0.468
SK30-110	1.750	1.430	1.265	1.10	0.913	0.847	0.748	0.671	0.527
SK30-120	1.908	1.560	1.380	1.20	0.996	0.924	0.816	0.732	0.624
SK30-135	2.150	1.755	1.553	1.35	1.121	1.040	0.918	0.824	0.702
SK30-160	2.490	2.080	1.840	1.60	1.328	1.232	1.088	0.976	0.832
SK30-185	2.870	2.405	2.128	1.85	1.536	1.425	1.258	1.129	0.962
SK30-200	3.180	2.600	2.300	2.00	1.660	1.540	1.360	1.220	1.040
SK30-250	3.820	3.250	2.875	2.50	2.075	1.925	1.700	1.525	1.300
SK30-300	4.550	3.900	3.450	3.00	2.490	2.310	2.040	1.830	1.560
SK30-400	6.000	5.200	4.600	4.00	3.320	3.080	2.720	2.440	2.080
SK30-500	7.440	6.500	5.750	5.00	4.150	3.850	3.400	3.050	2.600
SK30-600	8.900	7.800	6.900	6.00	4.980	4.620	4.080	3.660	3.120
SK30-700	10.350	9.100	8.050	7.00	5.810	5.390	4.760	4.270	3.640
SK30-800	11.600	10.400	9.200	8.00	6.640	6.160	5.440	4.880	4.160
SK30-900	13.250	11.700	10.350	9.00	7.470	6.930	6.120	5.490	4.680

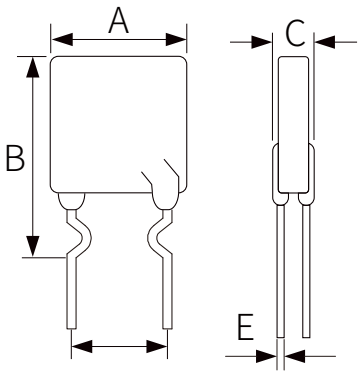
DIMENSIONS

Type 1:



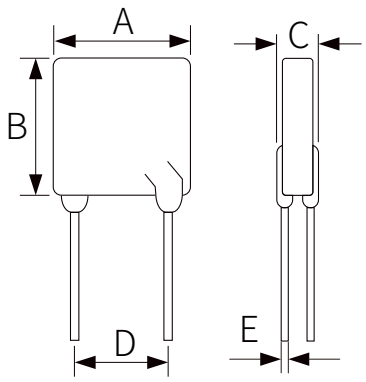
Unit :mm

Type 2:



Unit :mm

Type 3:



Unit :mm

Part Number	A(max)	B(max)	C(max)	D(typ)	E(mm)	TYPE
SK30-050	7.4	12.7	3.0	5.1	Φ0.5	TYPE 1
SK30-075	7.4	13.0	3.0	5.1	Φ0.5	TYPE 1
SK30-090	7.4	18.5	3.0	5.1	Φ0.5	TYPE 2
SK30-110	7.4	18.5	3.0	5.1	Φ0.5	TYPE 2
SK30-120	7.4	18.5	3.0	5.1	Φ0.5	TYPE 2
SK30-135	9.2	17.6	3.0	5.1	Φ0.5	TYPE 2
SK30-160	9.2	20.2	3.0	5.1	Φ0.5	TYPE 2
SK30-185	9.2	20.2	3.0	5.1	Φ0.5	TYPE 2
SK30-200	15.2	20.2	3.0	5.1	Φ0.5	TYPE 2
SK30-250	13.2	22.4	3.0	5.1	Φ0.5	TYPE 2
SK30-300	13.2	22.4	3.0	5.1	Φ0.8	TYPE 3
SK30-400	14.0	23.7	3.0	5.1	Φ0.8	TYPE 3
SK30-500	14.0	23.7	3.0	10.2	Φ0.8	TYPE 3
SK30-600	17.2	27.0	3.0	10.2	Φ0.8	TYPE 3
SK30-700	17.2	27.0	3.0	10.2	Φ0.8	TYPE 3
SK30-800	23.5	29.2	3.0	10.2	Φ0.8	TYPE 3
SK30-900	23.5	29.2	3.0	10.2	Φ0.8	TYPE 3

ENVIRONMENTAL SPECIFICATIONS

Items	Test Conditions	Accept/Reject Criteria
Resistance	In still air@25°C	Rmin≤R≤Rmax
Time to Trip	Specified current, Vmax,25°C	T≤max.Time to trip(Ttrip)
Hold Current	60 min,at IH	No trip
Trip Cycle Life	Vmax,Imax,100 cycles	No arcing or burning
Trip Endurance	Vmax,24 hours	No arcing or burning

PARAMETER CHARACTERISTIC CURVE

FIG.1: Thermal Derating Curve

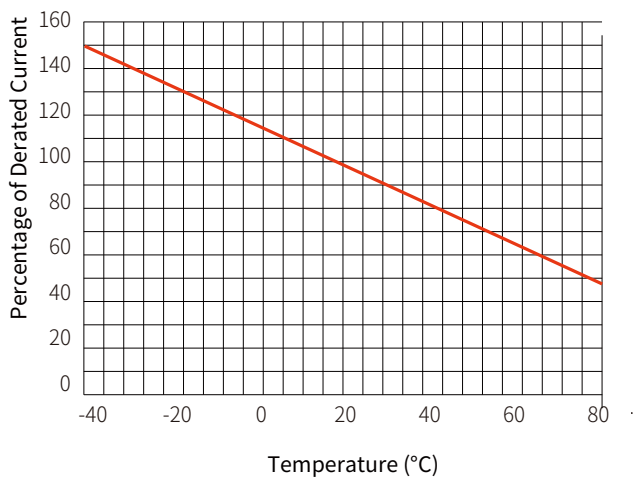
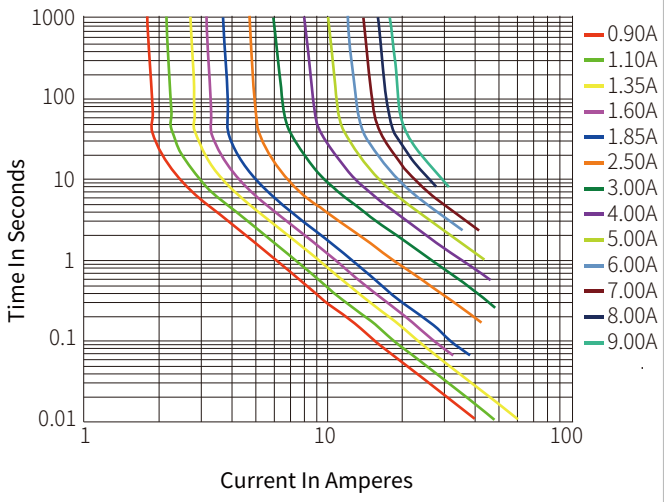
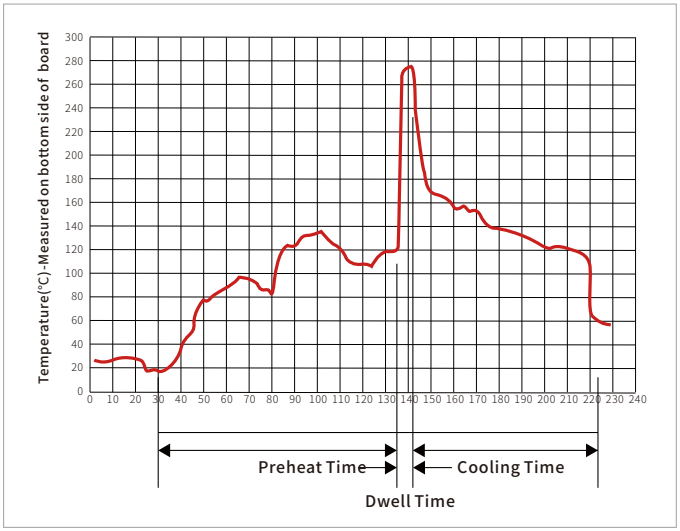


FIG.2: Average Time-Current Curve



WAVE SOLDERING



Wave Parameter		Lead–free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

ORDERING INFORMATION

Part Number	Base Quantity	Packing Option
SK30-050~SK30-250	1000pcs	Bulk
SK30-300~SK30-500	500pcs	Bulk
SK30-600~SK30-900	200pcs	Bulk

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