

FEATURES

- | I(hold): 0.10~2.50A

- | 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

ENVIRONMENTAL SPECIFICATIONS

Test	Conditions	Resistance change
Passive aging	+85°C, 1000 hrs	±8% typical
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	Ω	Ω
SK130-010	0.10	0.20	130	3	0.8	0.5	6	2.5	9.0
SK130-015	0.15	0.30	130	3	0.8	0.75	5.5	2.5	7.50
SK130-017	0.17	0.34	130	3	0.8	0.85	5.2	1.5	16
SK130-020	0.20	0.40	130	3	0.8	1.0	5.0	1.9	4.0
SK130-025	0.25	0.50	130	3	1.0	1.25	4.8	1.45	3.50
SK130-030	0.30	0.60	130	3	1.0	1.5	4.5	1.0	3.0
SK130-040	0.40	0.80	130	3	1.0	2.0	4.5	0.75	2.0
SK130-050	0.50	1.0	130	3	1.0	2.5	5.0	0.50	1.60
SK130-065	0.65	1.3	130	10	1.0	3.25	5.2	0.45	1.0
SK130-075	0.75	1.5	130	10	1.0	3.75	5.5	0.40	0.90
SK130-090	0.90	1.8	130	10	1.5	4.5	5.8	0.30	0.70
SK130-110	1.10	2.2	130	10	1.8	5.5	6.3	0.20	0.65
SK130-135	1.35	2.7	130	10	1.8	6.75	7.5	0.15	0.60
SK130-160	1.60	3.2	130	10	2.0	8.0	8	0.10	0.50
SK130-185	1.85	3.7	130	10	2.0	9.25	9	0.10	0.40
SK130-200	2.00	4.0	130	10	2.2	10.0	10	0.10	0.30
SK130-250	2.50	5.0	130	10	2.5	12.5	12	0.05	0.25

V_{max} = Maximum operating voltage device can withstand without damage at rated current (I_{max}).

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.

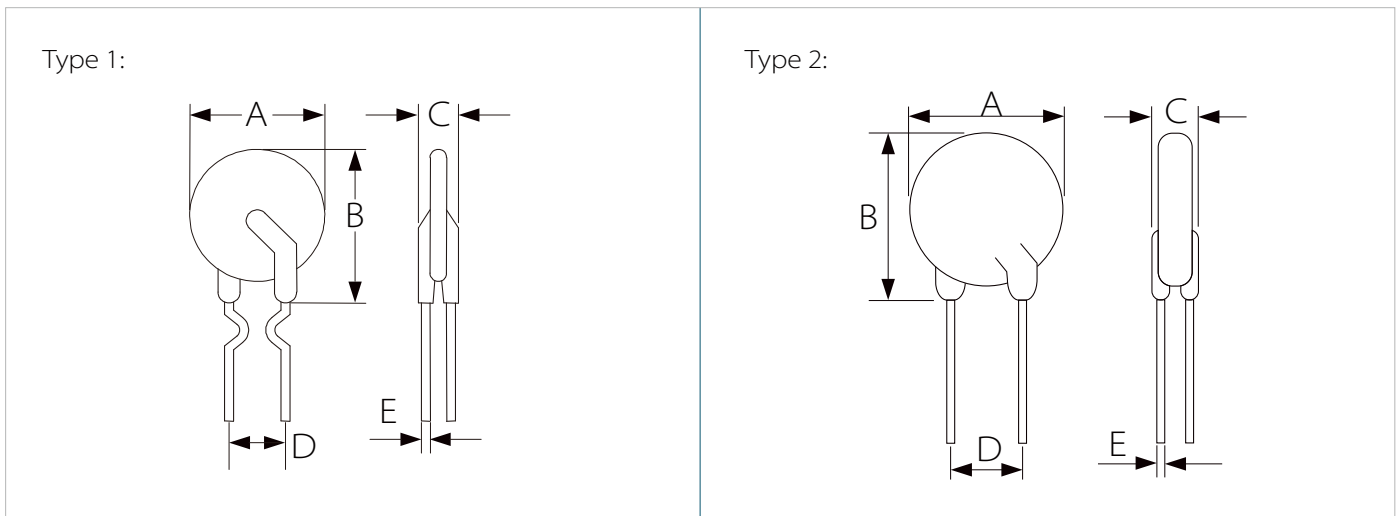
$Ri_{min/max}$ = Minimum/Maximum device resistance prior to tripping at 25°C.

$R1_{max}$ = 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	30 °C	40 °C	50 °C	60 °C	70 °C	85 °C
SK130 Series	147%	132%	118%	100%	90%	85%	76%	67%	60%	47%

DIMENSIONS



Part Number	A(max)	B(max)	C(max)	D(typ)	E(mm)	TYPE
SK130-010	7.4	12.7	3.8	5.1	Φ0.6	TYPE 1
SK130-015	7.4	13.0	3.8	5.1	Φ0.6	TYPE 1
SK130-017	7.4	13.5	3.8	5.1	Φ0.6	TYPE 1
SK130-020	7.6	13.5	3.8	5.1	Φ0.6	TYPE 1
SK130-025	7.6	13.5	3.8	5.1	Φ0.6	TYPE 1
SK130-030	8.0	14.0	3.8	5.1	Φ0.6	TYPE 1
SK130-040	9.4	15.0	3.8	5.1	Φ0.6	TYPE 1
SK130-050	10.2	15.2	3.8	5.1	Φ0.6	TYPE 1
SK130-065	12.8	18.0	3.8	5.1	Φ0.6	TYPE 1
SK130-075	12.8	18.0	3.8	5.1	Φ0.6	TYPE 1
SK130-090	14.5	19.6	3.8	5.1	Φ0.8	TYPE 2
SK130-110	16.3	21.3	3.8	5.1	Φ0.8	TYPE 2
SK130-135	17.0	22.0	3.8	5.1	Φ0.8	TYPE 2
SK130-160	20	25	3.8	5.1	Φ0.8	TYPE 2
SK130-185	22	23	3.8	5.1	Φ0.8	TYPE 2
SK130-200	25	27	3.8	10.2	Φ0.8	TYPE 2
SK130-250	27	32	3.8	10.2	Φ0.8	TYPE 2

ENVIRONMENTAL SPECIFICATIONS

Items	Test Conditions	Accept/Reject Criteria
Resistance	In still air@25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, V_{max} , 25°C	$T \leq \max.$ Time to trip (T_{trip})
Hold Current	60 min, at IH	No trip
Trip Cycle Life	V_{max} , I_{max} , 100 cycles	No arcing or burning
Trip Endurance	V_{max} , 24 hours	No arcing or burning

PARAMETER CHARACTERISTIC CURVE

FIG.1: Thermal Derating Curve

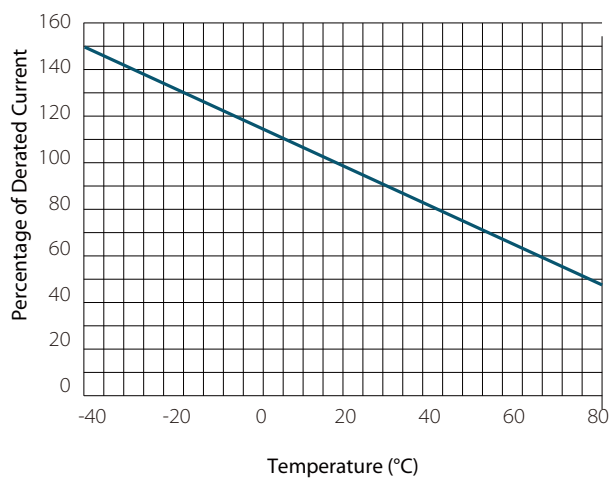
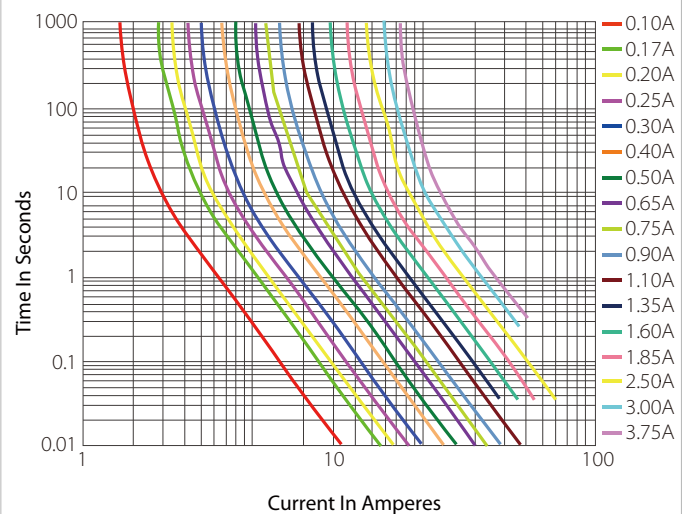
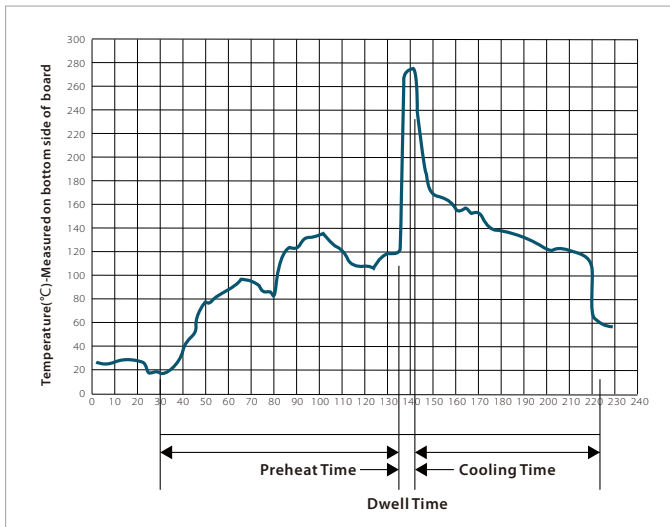


FIG.2: Average Time-Current Curve



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
SK130-010~SK130-065	1000pcs	Bulk
SK130-075~SK130-200	500pcs	Bulk

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