Features

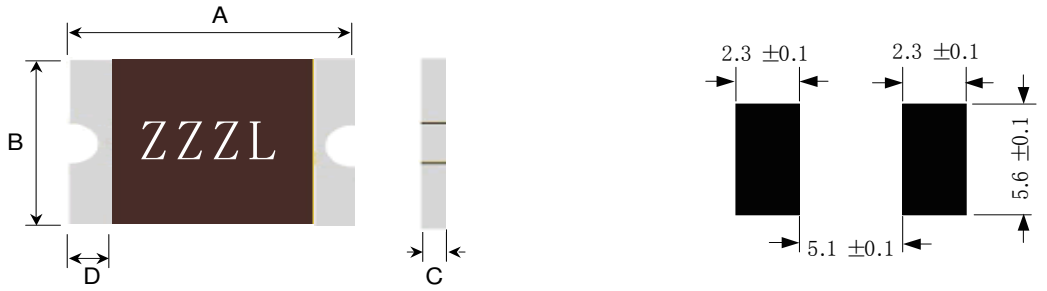
- Surface Mount Devices
- Lead free deivce
  Size 7555mm/2920 mils
  Surface Mount packaging for automated assembly
- Agency recognition:

Applications

Almost anywhere there is a low voltage power supply, up to DC60V and a load to be protested, including:

- Computer mother board, Modem.
- Telecommunication equipments

Dimensions (mm)



Product dimensions (mm)

Model	A		B		C		D
	min	max	min	max	min	max	min
SM030	6.73	7.98	4.80	5.44	0.60	1.30	0.30
SM050	6.73	7.98	4.80	5.44	0.60	1.30	0.30
SM075	6.73	7.98	4.80	5.44	0.60	1.30	0.30
SM100	6.73	7.98	4.80	5.44	0.40	1.00	0.30
SM125	6.73	7.98	4.80	5.44	0.40	0.90	0.30
SM150	6.73	7.98	4.80	5.44	0.40	0.90	0.30
SM185	6.73	7.98	4.80	5.44	0.30	0.90	0.30
SM200	6.73	7.98	4.80	5.44	0.30	0.90	0.30
SM250	6.73	7.98	4.80	5.44	0.30	0.90	0.30
SM260	6.73	7.98	4.80	5.44	0.30	0.90	0.30
SM300	6.73	7.98	4.80	5.44	0.60	1.30	0.30

Environmental Specifications

Test	Conditions	Resistance change
Passive aging	85℃,1000hrs	±5% typical
Humidity aging	85℃,85%℃R.H.,168hrs	±5% typical
Thermal shock	85℃,to-40℃,13times	±33% typical
Resistance to solvent	MIL-STD-202,Method 215	No change
Vibration	MIL-STD-202,Method 201	No change

Ambient operating confitions:-40℃ to 85℃

Maximum surface of the device in the tripped state is 125℃

Electrical characteristics(25℃)

Model	Ihold	Itrip	Vmax	Imax	Pd max	Maximum Time To Trip		Resistance	
						Current	Time	Rmin	Rmax
	(A)	(A)	(Vdc)	(A)	(w)	(A)	(S)	(Ω)	(Ω)
SM030	0.30	0.60	60	100	1.5	1.5	3.0	0.600	4.800
SM050	0.50	1.00	60	100	1.5	2.5	4.0	0.180	1.400
SM075	0.75	1.50	33	100	1.5	8.0	0.3	0.100	1.000
SM100	1.10	2.20	33	100	1.5	8.0	0.5	0.065	0.410
SM125	1.25	2.50	33	100	1.5	8.0	2.0	0.050	0.250
SM150	1.50	3.00	33	100	1.5	8.0	2.0	0.035	0.230
SM185	1.85	3.70	33	100	1.5	8.0	2.5	0.030	0.150
SM200	2.00	4.00	16	100	1.5	8.0	4.5	0.020	0.120
SM250	2.50	5.00	16	100	1.5	8.0	16.0	0.020	0.085
SM260	2.60	5.20	6	100	1.5	8.0	10.0	0.014	0.075
SM300	3.00	6.00	16	100	1.5	8.0	20.0	0.012	0.048

Ihold	Hold Current:Maximum current device will not trip in 25℃ still air.
Itrip	Trip current:Minimum current at which the device will always trip in 25℃ still air
Vmax	Maximum operating volatge device can withstand without damage at ratde current(imax).
Imax	Maximum fault current device can withstand without damage at rated voltage(Vmax).
Pd	Typical power dissipatde from device when in the tripped state in 25℃ still air.
Rmin/max	Minimum/Maximum device resistance prior to tripping at 25℃.
R1max	Maximum resistance of device at 25℃ measured one hour after trippde tripping.

*CAUTION Operation beyond the specified rating may result in damage and possible arcing.

Ihold versus tempetature

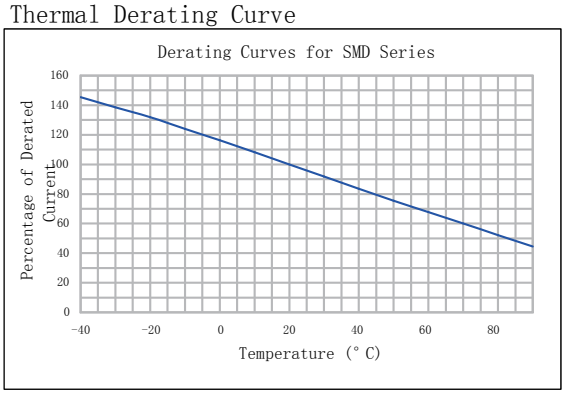
maximun ambient operating temperature(Tmao)vs.hold current(Ihold)

Model	—40℃	—20℃	0℃	25℃	40℃	50℃	60℃	85℃
SM030	0.45	0.40	0.35	0.30	0.25	0.23	0.20	0.14
SM050	0.76	0.67	0.59	0.50	0.42	0.38	0.33	0.23
SM075	1.13	1.01	0.88	0.75	0.62	0.56	0.50	0.34
SM100	1.66	1.47	1.29	1.10	0.91	0.83	0.73	0.50
SM125	1.89	1.68	1.46	1.25	1.04	0.94	0.83	0.56
SM150	2.27	2.01	1.76	1.50	1.25	1.13	1.00	0.74
SM185	2.80	2.47	2.17	1.85	1.54	1.39	1.22	0.85
SM200	3.02	2.68	2.34	2.00	1.66	1.50	1.32	0.90
SM250	3.78	3.35	2.93	2.50	2.08	1.88	1.65	1.13
SM260	3.64	3.25	2.91	2.60	2.26	2.08	1.95	1.13
SM300	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.34

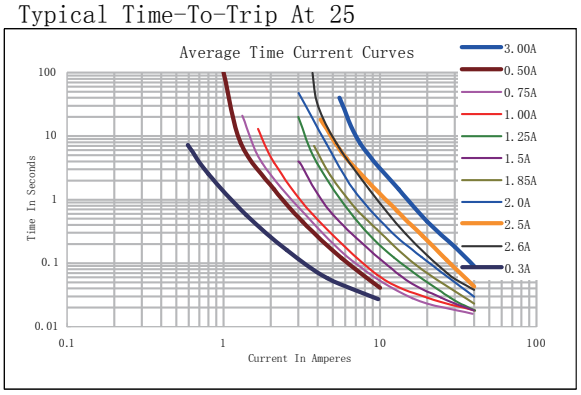
Termination pad characteristics

Terminal pad materials	Tin-Plated Nickle-Copper or Gold-Plated Nickle-Copper
Terminal pad solderability	Meets EIA specification RS186-9E and ANSI/J-STD-002 Category 3.

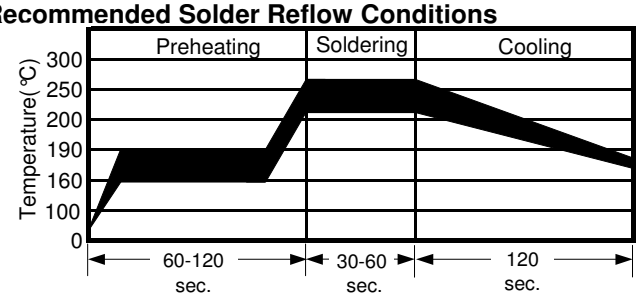
Thermal Derating Curve



Typical Time-To-Trip At 25



Recommended Solder Reflow Conditions



- Recommended reflow methods：IR, vapor phase oven, hot air oven.
- Devices are not designed to be wave soldered to the bottom side of the board.
- Recommended maximum paste thickness is 0.25 mm (0.010 inch).
- Devices can be cleaned using standard method and solvents.

Note：If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Package Information

Reel:

SM030～300	2000pcs/Reel