

Features

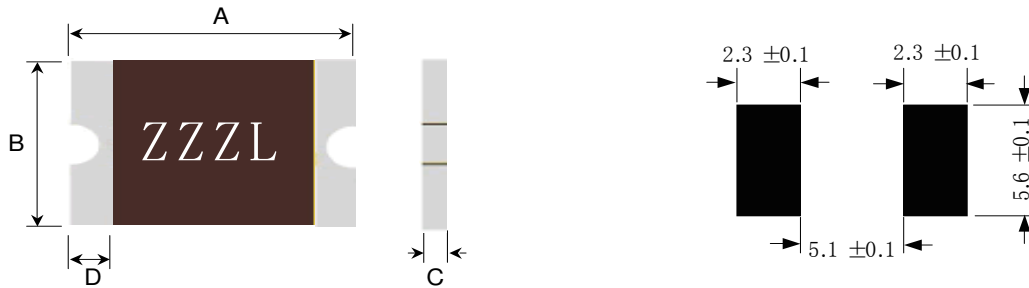
- Surface Mount Devices
- Lead free device
Size 7555mm/2920 mils
Surface Mount packaging for automated assembly
- Agency recognition:

Applications

Almost anywhere there is a low voltage power supply, up to DC60V and a load to be protected, 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°C, 1000hrs	±5% typical
Humidity aging	85°C, 85% R.H., 168hrs	±5% typical
Thermal shock	85°C, to -40°C, 13times	±33% 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 of the device in the tripped state is 125°C

Electrical characteristics(25°C)

Model	Ihold (A)	Itrip (A)	Vmax (Vdc)	Imax (A)	Pd max (w)	Maximum Time To Trip		Resistance	
						Current (A)	Time (S)	Rmin (Ω)	Rmax (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°C still air.
- Itrip Trip current:Minimum current at which the device will always trip in 25°C 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°C still air.
- Rmin/max Minimum/Maximum device resistance prior to tripping at 25°C.
- R1max Maximum resistance of device at 25°C 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°C	-20°C	0°C	25°C	40°C	50°C	60°C	85°C
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

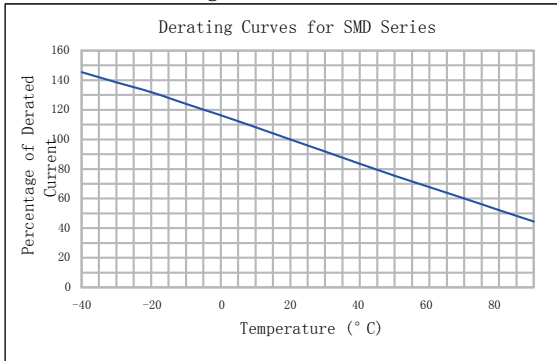
Terminal pad materials

Tin-Plated Nickle-Copper or Gold-Plated Nickle-Copper

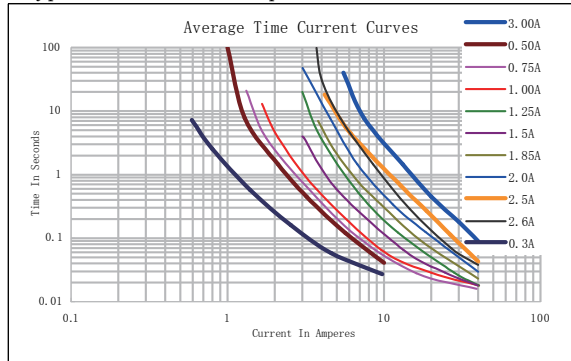
Terminal pad solderability

Meets EIA specification RS186-9E and ANSI/J-STD-002 Category 3.

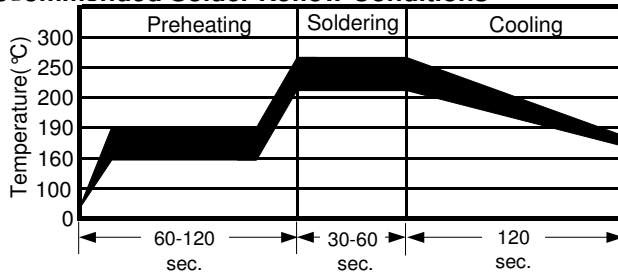
Thermal Derating Curve



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