Features

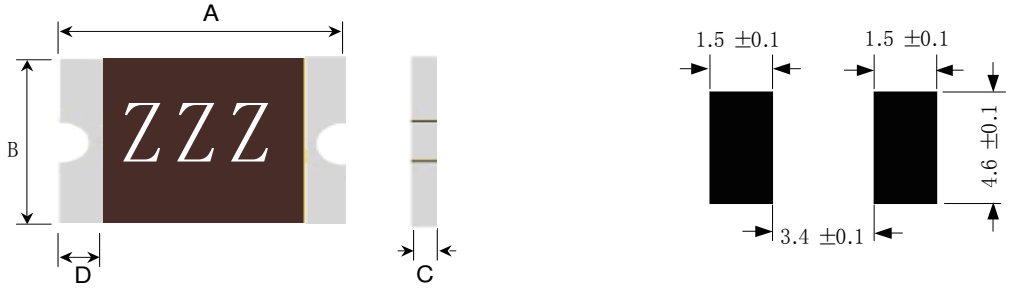
- Surface Mount Devices
- Lead free deivce
  Size 5045mm/2018 mils
  Surface Mount packaging for automated assembly
- Agency recognition:

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
TSM030	4.44	4.72	4.22	4.93	0.60	1.10	0.30
TSM050	4.44	4.72	4.22	4.93	0.60	1.10	0.30
TSM100	4.44	4.72	4.22	4.93	0.45	0.80	0.30
TSM100/33	4.44	4.72	4.22	4.93	0.45	0.80	0.30
TSM150	4.44	4.72	4.22	4.93	0.45	0.80	0.30
TSM200	4.44	4.72	4.22	4.93	0.45	0.80	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℃

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.

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)
TSM030	0.30	0.60	60	100	0.9	1.50	3.0	0.500	2.300
TSM050	0.55	1.20	60	100	1.0	2.5	3.00	0.200	1.000
TSM100	1.00	2.20	15	100	1.1	8.0	0.40	0.060	0.360
TSM100/33	1.00	2.20	33	100	1.1	8.0	0.4	0.060	0.360
TSM150	1.50	3.00	15.0	100	1.1	8.0	0.8	0.050	0.170
TSM200	2.00	4.00	10	100	1.1	8.0	2.4	0.030	0.100

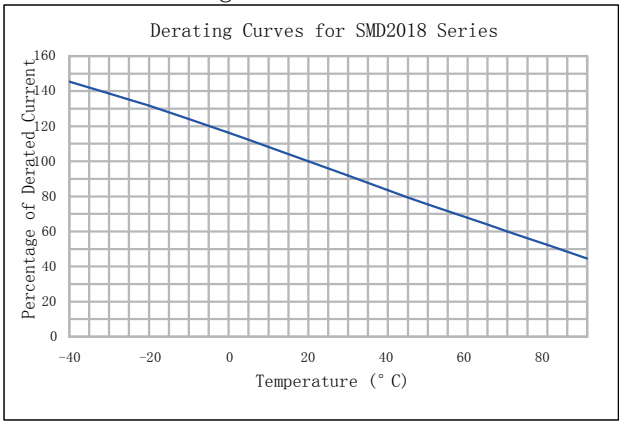
Ihold	Hold Current:Maximum current device will not trip in 25℃ still air.
Itrip	Trip current:Minimum current at which the device will always trip in 25℃ still air
Vmax	Maximum operating volatge device can withstand without damage at ratde currer
Imax	Maximum fault current device can withstand without damage at rated voltage(Vm
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.

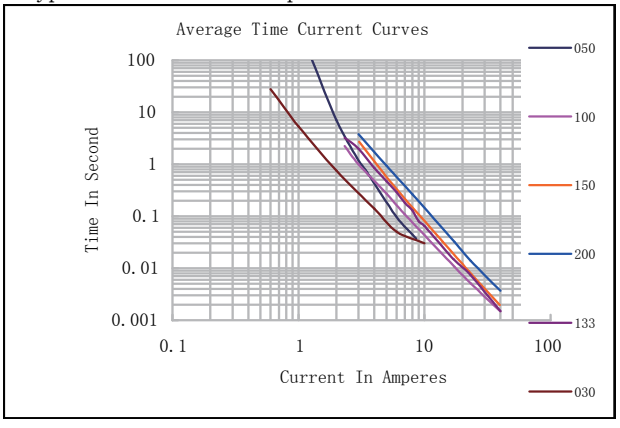
Ihold versus tempetature

Model	maximun ambient operating temperature(Tmao)vs.hold current(Ihold)								
	—40℃	—20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
TSM030	0.480	0.42	0.350	0.30	0.240	0.21	0.17	0.15	0.100
TSM050	0.87	0.77	0.67	0.55	0.460	0.41	0.36	0.31	0.23
TSM100	1.71	1.52	1.32	1.00	0.940	0.84	0.74	0.64	0.50
TSM100/33	1.71	1.52	1.32	1.00	0.940	0.84	0.74	0.64	0.50
TSM150	2.38	2.10	1.82	1.50	1.270	1.13	0.99	0.85	0.64
TSM200	2.95	2.65	2.35	2.00	1.740	1.59	1.44	1.29	1.06

Thermal Derating Curve



Typical Time-To-Trip At 25



Package Information

Reel:	
TSM030～050	1500pcs/Reel
TSM100～200	2500pcs/Reel