

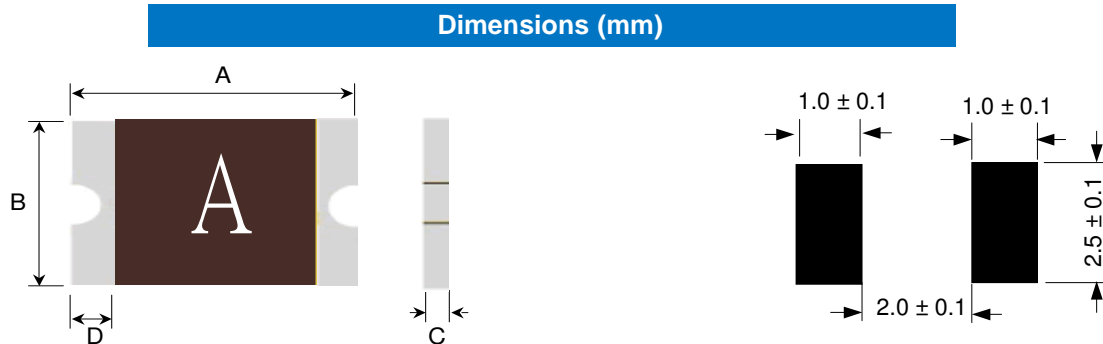
**Features**

- Surface Mount Devices
- Lead free device
  - Size 3225mm/1210 mils
  - Surface Mount packaging for automated assembly
- Agency recognition:

**Applications**

Almost anywhere there is a low voltage power supply, up to DC30V and a load to be protected, including:

- Computer mother board, Modem.
- Telecommunication equipments



**Product dimensions (mm)**

Model	A		B		C		D
	min	max	min	max	min	max	min
USM005	3.00	3.43	2.35	2.80	0.30	0.80	0.30
USM010	3.00	3.43	2.35	2.80	0.30	0.80	0.30
USM020	3.00	3.43	2.35	2.80	0.30	0.80	0.30
USM035	3.00	3.43	2.35	2.80	0.30	0.80	0.30
USM050	3.00	3.43	2.35	2.80	0.30	0.80	0.30
USM075	3.00	3.43	2.35	2.80	0.30	0.80	0.30
USM110	3.00	3.43	2.35	2.80	0.30	0.80	0.30
USM150	3.00	3.43	2.35	2.80	0.40	0.80	0.30
USM175	3.00	3.43	2.35	2.80	0.50	1.20	0.30
USM200	3.00	3.43	2.35	2.80	0.50	1.20	0.30

**Environmental Specifications**

Test	Conditions	Resistance change
Passive aging	85°C,1000hrs	±5% typical
Humidity aging	85°C,85%CR.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**

**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°C)**

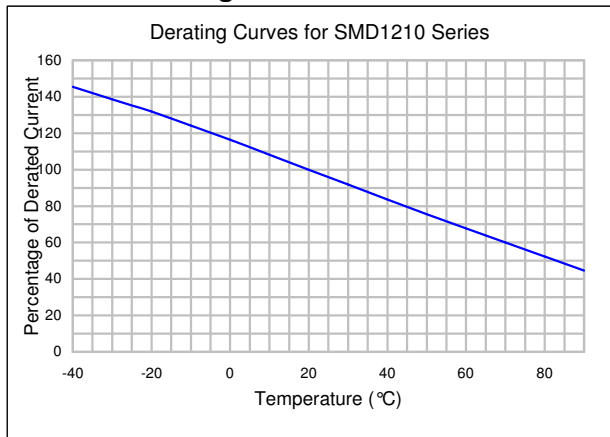
Model	Marking	Ihold (A)	Itrip (A)	Vmax (Vdc)	Imax (A)	Pd max (w)	Maximum Time To Trip		Resistance	
							Current (A)	Time (S)	Rmin (Ω)	Rmax (Ω)
USM005	A	0.05	0.15	30	100	0.6	0.25	1.5	2.800	50.000
USM010	B	0.10	0.30	30	100	0.6	0.5	0.60	0.800	15.000
USM020	C	0.20	0.40	30	100	0.6	8.0	0.02	0.400	5.000
USM035	D	0.35	0.75	6	100	0.6	8.0	0.2	0.200	1.300
USM050	F	0.50	1.00	13.2	100	0.6	8.0	0.1	0.180	0.900
USM075	G	0.75	1.50	6	100	0.6	8.0	0.1	0.070	0.400
USM110	H	1.10	2.20	6	100	0.6	8.0	0.3	0.050	0.210
USM150	L	1.50	3.00	6	100	0.6	8.0	0.5	0.030	0.110
USM175	N	1.75	3.50	6	100	0.8	8.0	0.6	0.020	0.080
USM200	S	2.00	4.00	6	100	0.8	8.0	1.0	0.015	0.070

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.

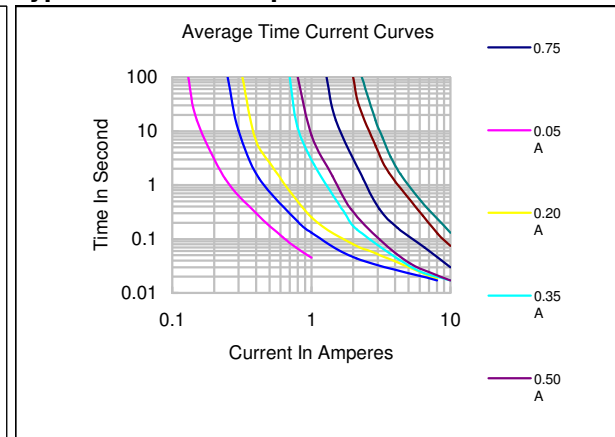
**Ihold versus tempetature**

Model	maximun ambient operating temperature(Tmao)vs.hold current(Ihold)									
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C	
USM005	0.080	0.07	0.070	0.05	0.040	0.04	0.03	0.03	0.020	
USM010	0.16	0.14	0.12	0.10	0.080	0.07	0.06	0.05	0.03	
USM020	0.29	0.26	0.22	0.20	0.160	0.14	0.13	0.11	0.08	
USM035	0.47	0.45	0.40	0.35	0.330	0.28	0.24	0.21	0.18	
USM050	0.76	0.67	0.58	0.50	0.430	0.40	0.36	0.32	0.28	
USM075	1.00	0.97	0.86	0.75	0.640	0.59	0.54	0.48	0.40	
USM110	1.69	1.48	1.29	1.10	0.880	0.76	0.65	0.57	0.43	
USM150	2.13	1.92	1.71	1.50	1.260	1.14	1.01	0.89	0.71	
USM175	2.54	2.30	2.02	1.75	1.470	1.33	1.18	1.05	0.86	
USM200	2.90	2.63	2.31	2.00	1.680	1.52	1.35	1.20	0.98	

**Thermal Derating Curve**



**Typical Time-To-Trip At 25°C**



**Package Information**

<b>Reel:</b>	
USM005~035	4500pcs/Reel
USM050~075	4000pcs/Reel
USM110~USM200	4500pcs/Reel