

**Features**

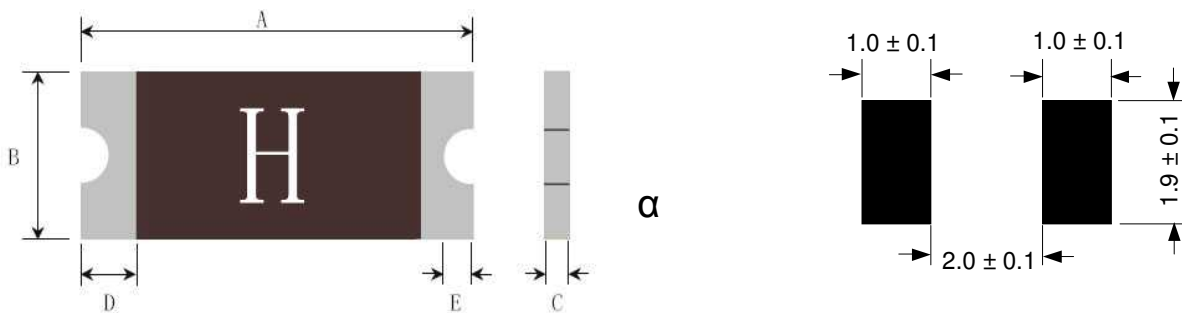
- Surface Mount Devices
- Lead free device  
Size 3216 mm/1206 mils
- Surface Mount packaging for automated assembly
- Agency recognition:UL

**Applications**

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

- Computer mother board,Modem,USB hub
- PDAs & Charger,Analog & digital line card
- Digital cameras,Disk drivers, CD-ROMs

**Dimensions (mm)**



**Product dimensions (mm)**

Model	A		B		C		D	E
	min	max	min	max	min	max	min	min
NSM005	3.00	3.5	1.5	1.8	0.60	1.1	0.15	0.1
NSM010	3.00	3.5	1.5	1.8	0.60	1.1	0.15	0.1
NSM025	3.00	3.5	1.5	1.8	0.40	0.90	0.15	0.1
NSM035	3.00	3.5	1.5	1.8	0.40	0.90	0.15	0.1
NSM050	3.00	3.5	1.5	1.8	0.35	0.85	0.15	0.1
NSM075	3.00	3.5	1.5	1.8	0.30	0.80	0.15	0.1
NSM100	3.00	3.5	1.5	1.8	0.40	0.80	0.15	0.1
NSM150	3.00	3.5	1.5	1.8	0.50	1.20	0.15	0.1
NSM200	3.00	3.5	1.5	1.8	0.50	1.20	0.15	0.1

**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

**Electrical characteristics(25 )**

Model	Marking	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	V <sub>max</sub> (Vdc)	I <sub>max</sub> (A)	P <sub>d max</sub> (w)	Maximum Time To Trip		Resistance	
							Current (A)	Time (S)	R <sub>min</sub> (Ω)	R <sub>max</sub> (Ω)
NSM005	<b>Z</b>	0.05	0.15	60	100	0.4	0.3	1.5	3.600	50.000
NSM010	<b>N</b>	0.10	0.25	60	100	0.4	0.5	1.00	1.600	15.000
NSM025	<b>A</b>	0.25	0.50	16	100	0.6	8.0	0.08	0.350	2.500
NSM035	<b>B</b>	0.35	0.75	6	100	0.6	8.0	0.1	0.250	1.300
NSM050	<b>F</b>	0.50	1.00	6	100	0.6	8.0	0.1	0.150	0.700
NSM050/13.2	<b>F</b>	0.50	1.00	13.2	100	0.6	8.0	0.1	0.150	0.700
NSM075	<b>G</b>	0.75	1.50	6	100	0.6	8.0	0.2	0.090	0.500
NSM100	<b>H</b>	1.00	1.80	6	100	0.6	8.0	0.3	0.055	0.270
NSM150	<b>I</b>	1.50	3.00	6	100	0.8	8.0	0.3	0.040	0.130
NSM200	<b>K</b>	2.00	3.50	6	100	0.8	8.0	1.5	0.018	0.080

I <sub>hold</sub>	Hold Current:Maximum current device will not trip in 25°C still air.
I <sub>trip</sub>	Trip current:Minimum current at which the device will always trip in 25°C still air
V <sub>max</sub>	Maximum operating volatge device can withstand without damage at ratde current(imax)
I <sub>max</sub>	Maximum fault current device can withstand without damage at rated voltage(Vmax).
P <sub>d</sub>	Typical power dissipatde from device when in the tripped state in 25°C still air.
R <sub>min/max</sub>	Minimum/Maximum device resistance prior to tripping at 25°C.
R <sub>1max</sub>	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.

**I<sub>hold</sub> versus tempetature**

Model	maximun ambient operating temperature(Tmao)vs.hold current(I <sub>hold</sub> )								
	—40°C	—20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
NSM005	0.074	0.066	0.058	0.05	0.0425	0.0375	0.035	0.03	0.0275
NSM010	0.145	0.33	0.115	0.10	0.085	0.08	0.07	0.06	0.055
NSM025	0.37	0.33	0.29	0.25	0.220	0.20	0.17	0.15	0.12
NSM035	0.50	0.45	0.40	0.35	0.300	0.27	0.24	0.21	0.15
NSM050	0.71	0.64	0.57	0.50	0.420	0.39	0.35	0.31	0.25
NSM075	1.14	1.01	0.88	0.75	0.650	0.59	0.54	0.49	0.41
NSM100	1.45	1.31	1.15	1.00	0.840	0.77	0.69	0.61	0.48
NSM150	2.18	1.94	1.72	1.50	1.280	1.17	1.06	0.96	0.77
NSM200	2.88	2.63	2.34	2.00	1.740	1.58	1.42	1.17	0.93

**Termination pad characteristics**

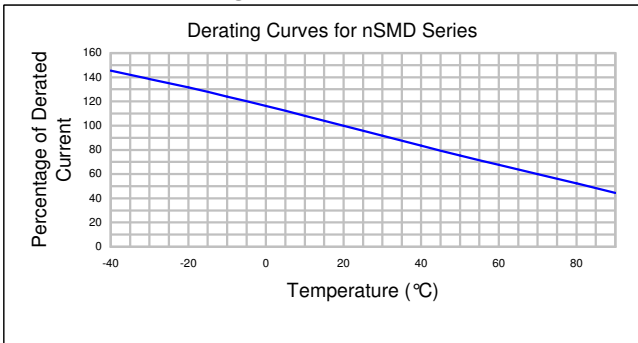
Terminal pad materials

Tin-Plated Nickel-Copper or Gold-Plated Nickel-Copper

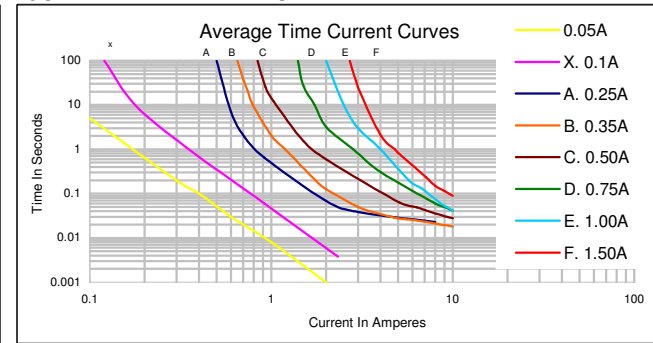
Terminal pad solderability

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

**Thermal Derating Curve**



**Typical Time-To-Trip At 25°C**



**Package Information**

**Reel:**

NSM005~010	3500pcs/Reel
NSM025~100	5000pcs/Reel
NSM150	3000pcs/Reel
NSM200	3500pcs/Reel