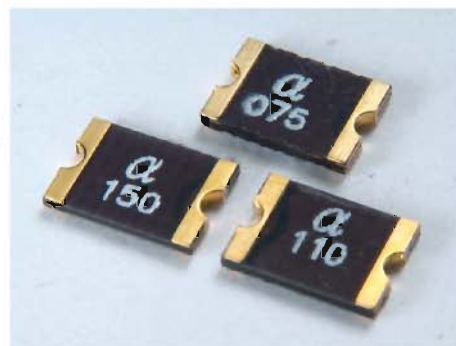


## Type mSMD (1812) Series

Surface-mount Resettable Devices



### Approvals

UL Recognized 0.1A~2A

### Agency File Numbers

UL E201504

### Electrical Characteristics

#### Operating/Storage Temperature

-40°C to +85°C

#### Maximum Device Surface Temperature

In Tripped State 125°C

#### Passive Aging

+85°C, 1000Hours, ±5% Typical Resistance Change

#### Humidity Aging

+85°C, 85%R.H., 168Hours, ±5% Typical Resistance Change

#### Thermal Shock:

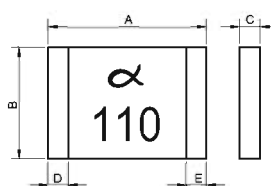
MIL-STD-202, Method 215, +85°C / -40°C,  
20 Times, ±33% Typical Resistance Change

#### Vibration

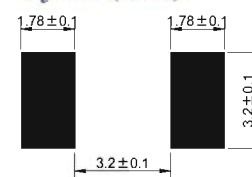
MIL-STD-202, Method 201, 1 No Resistance Change

### Electrical Specification

### Mechanical Dimensions



### Recommended pad layout (mm)



### Physical and Dimension (Unit: mm)

Mode	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
mSMD010	4.37	4.73	3.07	3.41	0.50	1.00	0.30	0.25
mSMD014	4.37	4.73	3.07	3.41	0.50	1.00	0.30	0.25
mSMD020	4.37	4.73	3.07	3.41	0.50	1.00	0.30	0.25
mSMD030	4.37	4.73	3.07	3.41	0.50	1.00	0.30	0.25
mSMD050	4.37	4.73	3.07	3.41	0.27	0.65	0.30	0.25
mSMD075	4.37	4.73	3.07	3.41	0.27	0.65	0.30	0.25
mSMD110	4.37	4.73	3.07	3.41	0.27	0.65	0.30	0.25
mSMD110-16V	4.37	4.73	3.07	3.41	0.27	0.65	0.30	0.25
mSMD125	4.37	4.73	3.07	3.41	0.27	0.65	0.30	0.25
mSMD150	4.37	4.37	3.07	3.41	0.27	0.65	0.30	0.25
mSMD150-16V	4.37	4.37	3.07	3.41	0.27	0.65	0.30	0.25
mSMD160	4.37	4.37	3.07	3.41	0.27	0.65	0.30	0.25
mSMD200	4.37	4.37	3.07	3.41	0.50	1.10	0.30	0.25
mSMD260	4.37	4.37	3.07	3.41	0.50	1.80	0.30	0.25

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

Packaging Tape & Reel Quantity 2,000 pcs/reel

Mode	V <sub>max</sub> (Vdc)	I <sub>max</sub> (A)	I <sub>hold</sub> @25°C (A)	I <sub>trip</sub> @25°C (A)	P <sub>d</sub> Typ. (W)	Maximum Time To Trip		Resistance	
						Current (A)	Time (Sec)	R <sub>ityp</sub> (Ω)	R <sub>1max</sub> (Ω)
mSMD010	30.0	10	0.10	0.30	0.8	0.5	1.50	0.750	15.000
mSMD014	33.0	10	0.14	0.34	0.8	1.5	0.15	0.650	6.000
mSMD020	30.0	10	0.20	0.40	0.8	8.0	0.02	0.350	5.000
mSMD030	30.0	10	0.30	0.60	0.8	8.0	0.10	0.250	3.000
mSMD050	15.0	10	0.50	1.00	0.8	8.0	0.15	0.150	1.000
mSMD075	13.2	10	0.75	1.50	0.8	8.0	0.20	0.090	0.450
mSMD110	8.0	10	1.10	2.20	0.8	8.0	0.30	0.050	0.250
mSMD110-16V	16.0	10	1.10	2.20	0.8	8.0	0.30	0.050	0.250
mSMD125	16.0	10	1.25	2.50	0.8	8.0	0.30	0.050	0.140
mSMD150	8.0	10	1.50	3.00	0.8	8.0	0.40	0.040	0.160
mSMD150-16V	16.0	10	1.50	3.00	0.8	8.0	0.50	0.040	0.160
mSMD160	8.0	10	1.60	2.80	0.8	8.0	1.00	0.030	0.130
mSMD200	8.0	10	2.00	4.00	0.8	8.0	2.00	0.020	0.100
mSMD260	8.0	10	2.60	5.00	0.8	8.0	2.50	0.015	0.050

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 voltage device can withstand without damage at rated current (I<sub>max</sub>).

I<sub>max</sub> = Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>).

P<sub>d</sub> = Maximum power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.

R<sub>ityp</sub> = Minimum/Maximum device resistance prior to tripping at 25°C.

R<sub>1max</sub> = Maximum device resistance is measured one hour post reflow.

**CAUTION** : Operation beyond the specified ratings may result in damage and possible arcing and flame.