Time-Lag SMD Fuses
1206

multicomp PRO

RoHS Compliant

Description

The SMD fuses stand out due to their ultra-small size and excellent electrical performance, reliability and quality. The solder-free design provides outstanding on-off and temperature cycling characteristics during operation and also makes our chip fuses more heat and shock tolerant than typical subminiature fuses.

Applications

Industrial products such as cellphones, DVD players, battery packs, hard disk drives and digital cameras.

Features

- High inrush current withstanding capability
- Compatible with reflow and wave soldering
- Ceramic and glass construction
- Excellent environmental integrity
- AEC-Q200 Automotive Grade Certified
- Lead-free and Halogen-free
- Designed to UL 248-14

Specifications

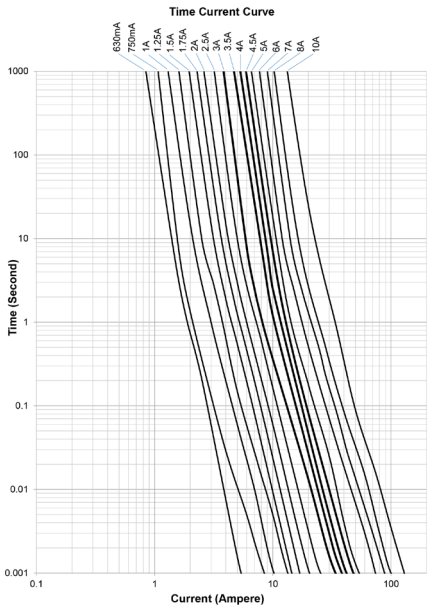
Operating Temperature	: -55°C to +150°C
Storage Conditions	: +10°C to +60°C
Relative Humidity	: ≤ 75% yearly average without dew, maximum 30 days at 95%
Vibration Resistance	: 24 cycles at 15 min. each 10-60Hz at 0.75mm amplitude 60-2000Hz at 10g acceleration

Electrical Characteristics

Time vs Current Characteristics Table
(measured with constant current power supply)

Time vs Current Characteristics			
Rated current	**100%**	**350%**	**1000%**
6A to 10A	>4h	≤5s	0.2ms to 20ms

Average Time Current (I-T) Curves



Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

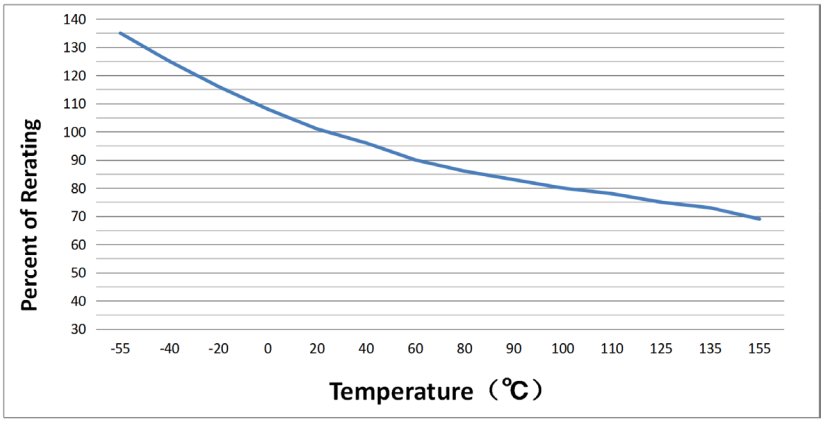
multicomp PRO

Electrical Characteristics at 25°C

Amp Code	Rated Current	Rated Voltage DC	Typical Voltage Drop (mV)	Breaking Capacity	Typical Melting I^2T (A^2s)	Typical Cold Resistance (mΩ)	Alpha Mark
1600	6.00A	24V/ 32V DC	138	50A@32V DC 300A@24V DC	12.5	15.0	F
1700	7.00A		131		14.5	12.0	7
1800	8.00A		122	300A@24V DC 150A@32V DC	16.5	8.8	M
2100	10.00A		105		25	6.0	U

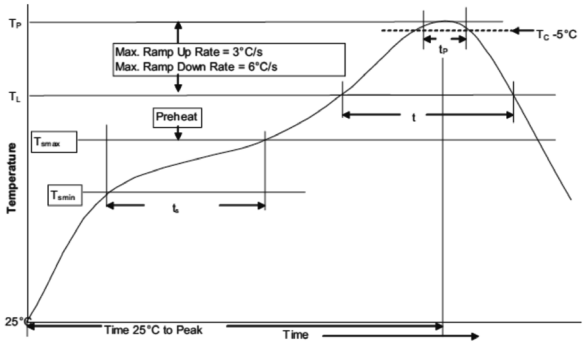
1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C
3. Typical Pre-arcing I^2t are measured at 10In current choice fuse for surge application (USB charger etc.), make sure the I^2t of fuse is 4 times than surge.

Temperature Re-rating Curve



Normal ambient temperature : 23 ±3°C
Operating temperature : -55°C ~ +150°C, with proper correction factor applied

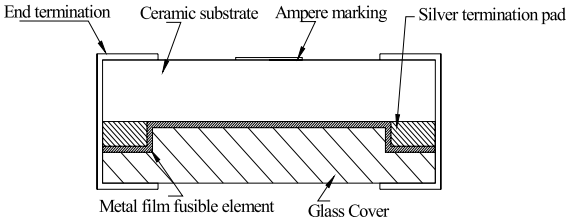
Soldering Parameters



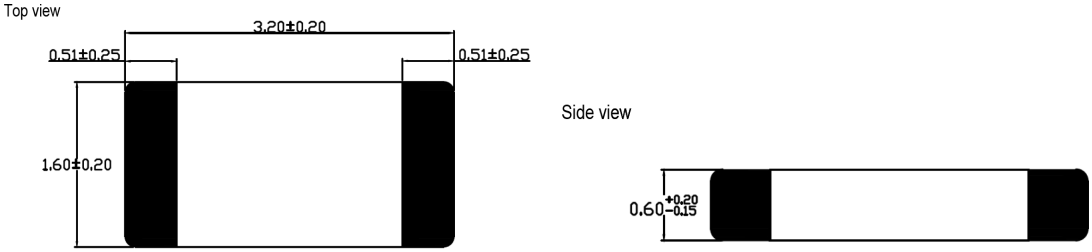
1. Infrared Reflow:
   Temperature: 260°C
   Time: 30sec Max.
2. Wave Soldering:
   Reservoir Temperature: 260°C
   Time in Reservoir: 10sec Max.

Profile Feature		Pb-Free Assembly
Average Ramp-UP Rate(Tsmax to Tp)		3°C/s Max.
Preheat	Temperature Min (Ts min)	150°C
	Temperature Max (Ts max)	200°C
	Time (Tsmin to Ts max)	60sec to 120sec
Liquidous temperature(TL) Time at liquidous(tL)		217°C 60 to 150S
Peak package body temperature (Tp)		260°C
Time (tP) within 5°C of the specified classification temperature (Tc)		30S
Average ramp-down rate (Tp to Tsmax)		6°C/s Max.
Time (25°C to Peak Temperature)		8 Minutes Max.

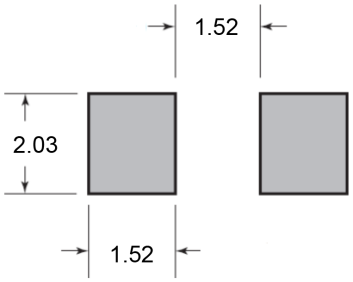
Mechanical Specifications



Diagram

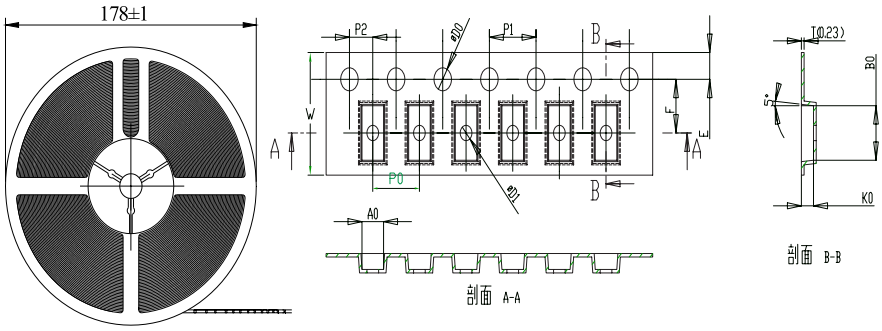


Recommended Land Pattern



Dimensions : Millimetres

Packing Information



W	E	F	D0	D1	P0	P1	P2	P0×10	t	A0	B0	K0
8 ±0.2	1.75 ±0.1	3.5 ±0.05	1.5 +0.1/-0	1 ±0.1	4 ±0.05	4 ±0.01	2 ±0.05	40 ±0.2	0.25 ±0.05	1.85 ±0.1	3.56 ±0.1	1.04 ±0.1

Part Number Table

Description	Part Number
SMD Fuse, Time-Lag, 6A, 32V DC, 1206	MCCFB1206TTT/6
SMD Fuse, Time-Lag, 7A, 32V DC, 1206	MP001611
SMD Fuse, Time-Lag, 8A, 32V DC, 1206	MCCFB1206TTT/8
SMD Fuse, Time-Lag, 10A, 32V DC, 1206	MCCFB1206TTT/10

Dimensions : Millimetres