

# Fast-Acting 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 SMD 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

- AEC-Q200 automotive grade certified
- Compatible with reflow and wave soldering
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead-free and Halogen-free
- Designed to UL 248-14

## Specifications

Operating Temperature	: -55°C to +125°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

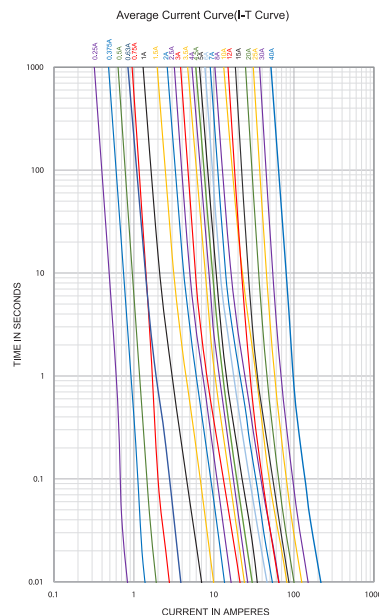
## Electrical Characteristics

### Time vs Current Characteristics Table

(measured with constant current power supply)

Time vs Current Characteristics			
Rated current	100%	250%	350%
0.25A to 5A	>4h	<5s	-
6A to 20A	>4h	-	<5s

## Average Time Current (I-T) Curves



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

**multicomp** PRO

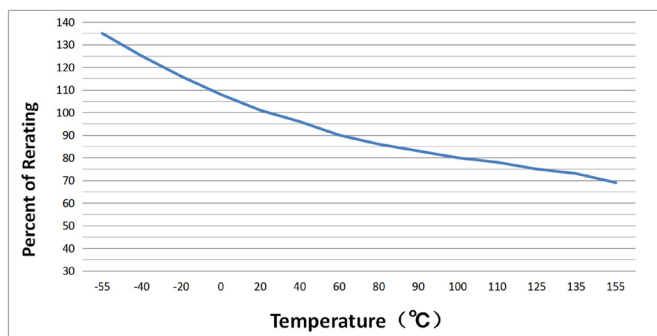
# Fast-Acting SMD Fuses 1206

## Electrical Characteristics at 25°C

Amp Code	Rated Current	Rated Voltage DC	Typical Voltage Drop (mV)	Breaking Capacity	Typical Melting I <sup>2</sup> T (A <sup>2</sup> s)	Typical Cold Resistance (mΩ)	Alpha Mark
0250	0.25A	72VDC 63VDC 32VDC 24VDC	1400	50A@72V DC 50A@63V DC 50A@32V DCC 300A@24V DC	0.00043	3500	.25
0375	0.375A		715		0.00083	1750	E
0500	0.5A		648		0.0025	1000	0.5
0750	0.75A		605		0.0058	540	.75
1100	1A		515		0.13	465	H
1150	1.5A		365		0.16	215	K
1200	2A		315		0.42	120	N
1250	2.5A		242		0.66	75	O
1300	3A		185		1.41	48	P
1400	4A		175		1.75	33	S
1500	5.00A	32VDC	143	50A@32V DC	2.92	20	T
1700	7.00A	24VDC	141	300A@24V DC	12.7	11.75	7
1800	8.00A	32VDC 24VDC	112	150A@32V DC 300A@24V DC	14.5	8.25	M
2100	10.00A		105		20.5	6.50	U
2120	12.00A		88		11.6	5.00	12
2150	15.00A		80		16.8	3.65	15
2200	20.00A		65		47.8	1.75	20

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<sup>2</sup>t are measured at 10In Current

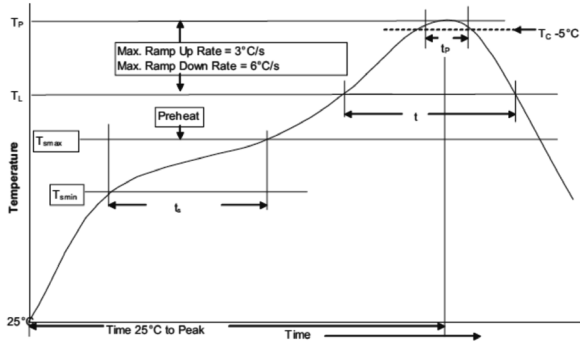
## Temperature Re-rating Curve



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

# Fast-Acting SMD Fuses 1206

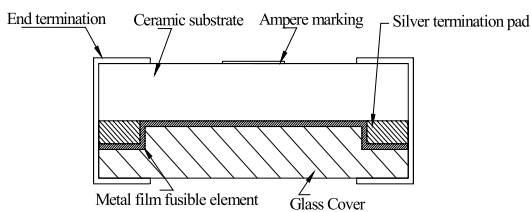
## Soldering Parameters



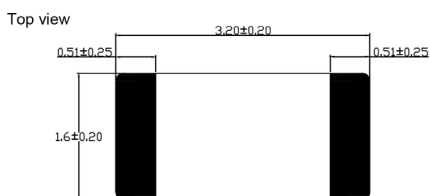
1. Infrared Reflow:
  - Temperature: 260°C
  - Time: 5S
  - Recommend reflow profile
2. Wave Soldering:
  - Reservoir Temperature: 260°C
  - Time in Reservoir: 10sec Max.

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 (Tmin to Ts max)	60sec to 120sec
Liquidous temperature(TL)	217°C	
Time at liquidous(tL)	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.	

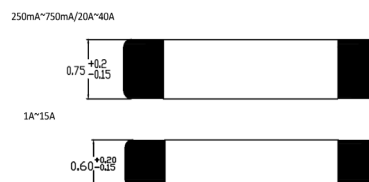
## Mechanical Specifications



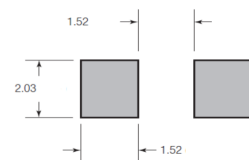
## Diagram



Side view



## Recommended Land Pattern

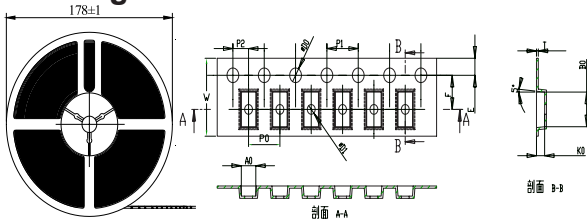


Dimensions : Millimetres

# Fast-Acting SMD Fuses 1206

**multicomp** PRO

## Packing Information



### 1A to 15A

P2	P0×10	t	A0	B0	K0
2 ±0.05	40 ±0.2	0.25 ±0.05	1.85 ±0.1	3.56 ±0.1	1.04 ±0.1

W	E	F	D0	D1	P0	P1
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

### 0.25A to 0.75A & 20A to 40A

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	1.27 ±0.1

## Part Number Table

Description	Part Number
SMD Fuse, Fast-Acting, 0.25A, 32V DC, 1206	MCCFB1206TFF/250
SMD Fuse, Fast-Acting, 0.375A, 32V DC, 1206	MCCFB1206TFF/375
SMD Fuse, Fast-Acting, 0.5A, 32V DC, 1206	MCCFB1206TFF/500
SMD Fuse, Fast-Acting, 0.5A, 72V DC, 1206	MP001605
SMD Fuse, Fast-Acting, 0.75A, 32V DC, 1206	MCCFB1206TFF/750
SMD Fuse, Fast-Acting, 1A, 32V DC, 1206	MCCFB1206TFF/1
SMD Fuse, Fast-Acting, 1A, 72V DC, 1206	MP001599
SMD Fuse, Fast-Acting, 1.5A, 32V DC, 1206	MCCFB1206TFF/1.5
SMD Fuse, Fast-Acting, 1.5A, 72V DC, 1206	MP001600
SMD Fuse, Fast-Acting, 2A, 32V DC, 1206	MCCFB1206TFF/2
SMD Fuse, Fast-Acting, 2.5A, 32V DC, 1206	MCCFB1206TFF/2.5
SMD Fuse, Fast-Acting, 2.5A, 72V DC, 1206	MP001601
SMD Fuse, Fast-Acting, 3A, 32V DC, 1206	MCCFB1206TFF/3
SMD Fuse, Fast-Acting, 4A, 32V DC, 1206	MCCFB1206TFF/4
SMD Fuse, Fast-Acting, 5A, 32V DC, 1206	MP001602
SMD Fuse, Fast-Acting, 7A, 32V DC, 1206	MCCFB1206TFF/7
SMD Fuse, Fast-Acting, 8A, 32V DC, 1206	MCCFB1206TFF/8
SMD Fuse, Fast-Acting, 10A, 32V DC, 1206	MCCFB1206TFF/10
SMD Fuse, Fast-Acting, 12A, 32V DC, 1206	MCCFB1206TFF/12
SMD Fuse, Fast-Acting, 15A, 32V DC, 1206	MCCFB1206TFF/15
SMD Fuse, Fast-Acting, 20A, 32V DC, 1206	MCCFB1206TFF/20

Dimensions : Millimetres

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

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

**multicomp** PRO