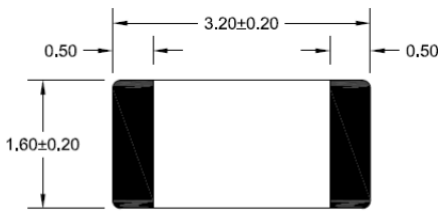


# Type 12H

## 1206 Fast Acting Line Voltage SMD Fuses



### Description

12H Series are the fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.

### Features

- AEC-Q200 Automotive Grade Certified
- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- One time positive disconnect
- Lead Free and Halogen free material

### Applications

- Power supplies
- Battery Chargers
- Consumer Electronics
- Industrial Controllers

### Electrical Characteristics for Series

Rating Current	100% of Ampere Rating	250% of Ampere Rating
250mA~5A	4 Hour, Min	5sec. Max.

### Electrical Characteristic Specifications by Item

Part No	Rated Voltage		Rated Current (A)	Breaking Capacity (A) 1	Typical Cold Resistance (mOhms) 2	Typical Voltage Drop (mV)	Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec) 3	Alpha Mark
	DC	AC						
12H0250	125 V	125 V	0.25	50A	3608	1407	0.0004	0.25
12H0375			0.375		1882	718	0.0008	E
12H0500			0.500		1028	650	0.0022	0.5
12H0750			0.750		601	616	0.0057	0.75
12H1100			1		240	300	0.0075	H
12H1150			1.5		160	245	0.013	K
12H1200			2		80	200	0.04	N
12H1250			2.5		51	140	0.045	O
12H1300			3		32	130	0.065	P
12H1350			3.5		25	120	0.075	R
12H1400	72V	72V	4	20	110	0.105	S	
12H1500			5	15	100	0.185	T	

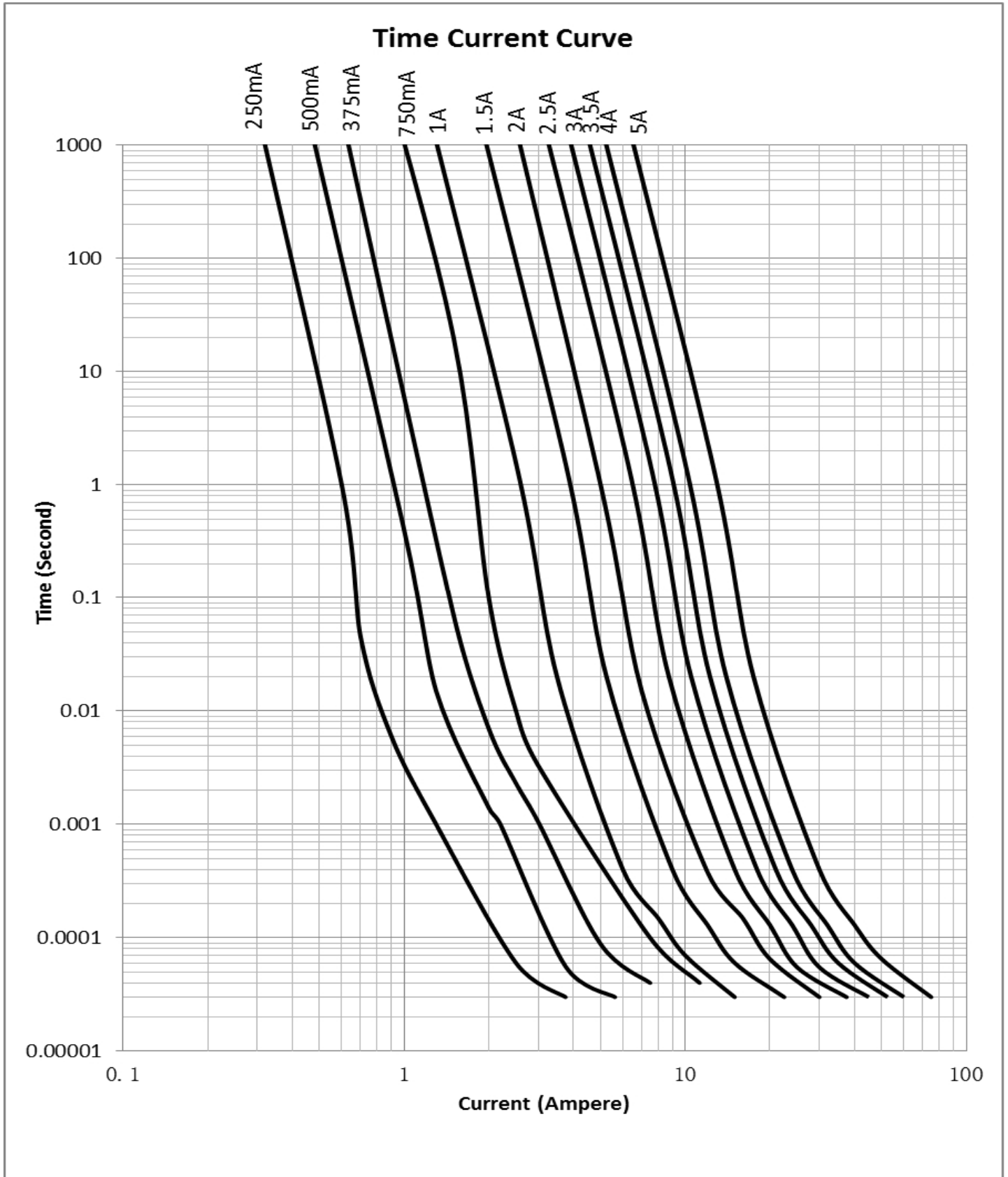
- \* AC Interrupting Rating (measured at designated voltage, 100% power factor); DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds, battery source)
- \* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C
- \* Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current

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### Average Time Current Curves



## Type 12H

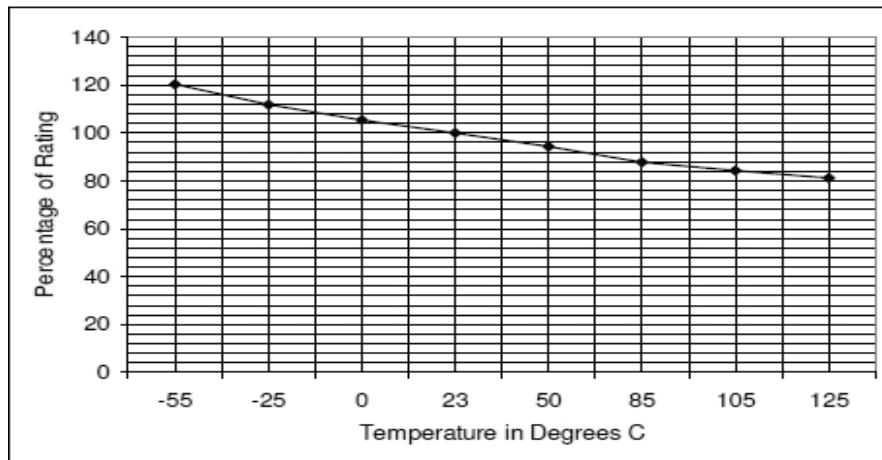
1206 Fast Acting Line Voltage SMD Fuses



### Temperature Re-rating Curve

\* Normal ambient temperature:  $23 \pm 3^\circ\text{C}$

\* Operating temperature:  $-55 \sim +125^\circ\text{C}$ , with proper



### Soldering Method

#### Wave solder

Reservoir temperature:  $260^\circ\text{C}$

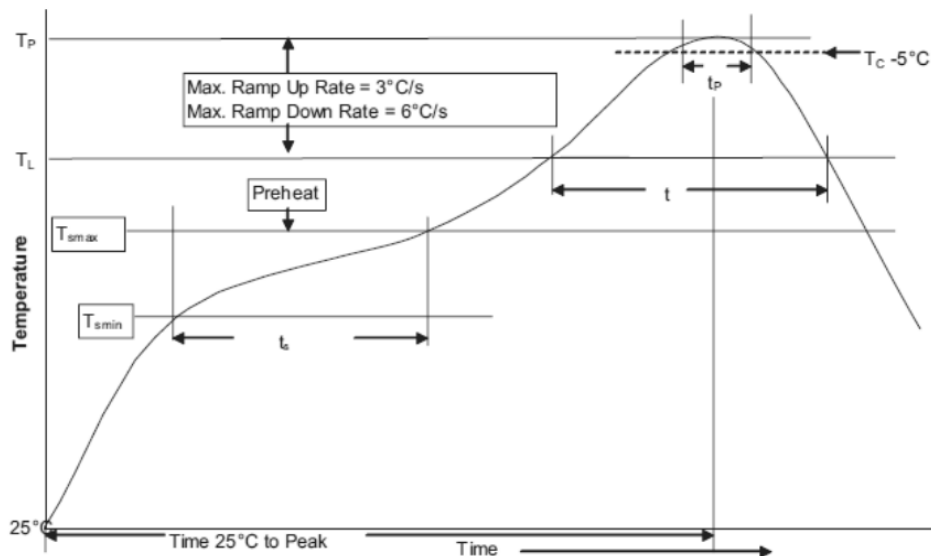
Time in reservoir: 10 seconds maximum

#### Infrared reflow

Temperature:  $260^\circ\text{C}$

Time: 30 seconds maximum

### Solder reflow profile



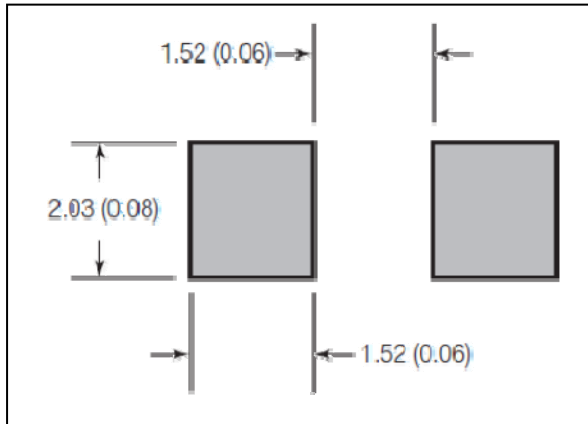
Profile Feature	Lead(Pb)free solder	
Preheat and soak	Temperature min. ( $T_{smin}$ )	$150^\circ\text{C}$
	Temperature max. ( $T_{smax}$ )	$200^\circ\text{C}$
	Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	60 - 120 Seconds
Average ramp up rate $T_{smax}$ to $T_p$	$3^\circ\text{C} / \text{Second Max.}$	
Liquidous temperature ( $T_L$ )	$217^\circ\text{C}$	
Time at liquidous ( $t_L$ )	60 - 150 Seconds	
Peak package body temperature ( $T_p$ )	$260^\circ\text{C}$	
Time ( $T_p$ ) within $5^\circ\text{C}$ of the specified classification temperature ( $T_c$ )	30 Seconds	
Average ramp-down rate ( $T_p$ to $T_{smax}$ )	$6^\circ\text{C} / \text{Second Max.}$	
Time (25°C to Peak Temperature)	8 Minutes Max.	

## Type 12H

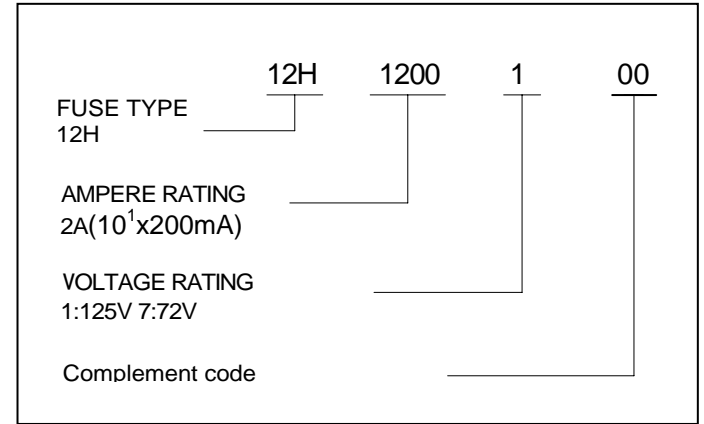
1206 Fast Acting Line Voltage SMD Fuses



### Mechanical Dimensions Unit:mm(inch)



### Ordering Information



### Packaging

Packaging Option	Packaging Specification	Quantity
12H	tape-and-reel	3000