

0603 Time Delay SMD Fuses

06 110 Series



Description

06 110 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.



Electrical Characteristics			
Rated Current	1.0In	2.0In	2.5In
1A~8A	4 hour minimum	1~60 sec	5 sec maximum

Features

- High inrush current withstanding capability
- AEC-Q200 Automotive Grade Certified
- Compatible with reflow and wave solder
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

Specifications

Specification							
Part No.	Rated Voltage	Rated Current (A)	Breaking Capacity (A) 1	Typical Cold Resistance (mOhms) ²	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t (A ² Sec) ³	Alpha Mark
	DC						
06 110.1	32V	1	50A	250	335	0.011	B
06 110.1.5		1.5	50A	150	270	0.045	H
06 110.2		2	50A	78	160	0.115	K
06 110.2.5		2.5	50A	49	145	0.14	L
06 110.3		3	50A	35	130	0.28	O
06 110.3.5		3.5	50A	28	130	0.5	R
06 110.4		4	50A	18	120	0.6	S
06 110.5		5	50A	14	110	1.9	T
06 110.6		6	50A	11	110	2.3	V**
06 110.7		7	50A	9.5	90	3	X**
06 110.8		8	50A	7.0	80	4.5	Z**

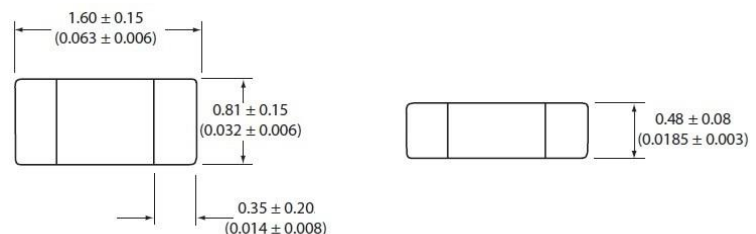
1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees
3. Typical Pre-arcing I²t are measured at 10In Current.

Choice fuse for surge application (USB charger etc.), make sure the I²t of fuse is 4 times than surge.

**Different with other ratings, the color of glass cover of 6A, 7A and 8A is BLUE color

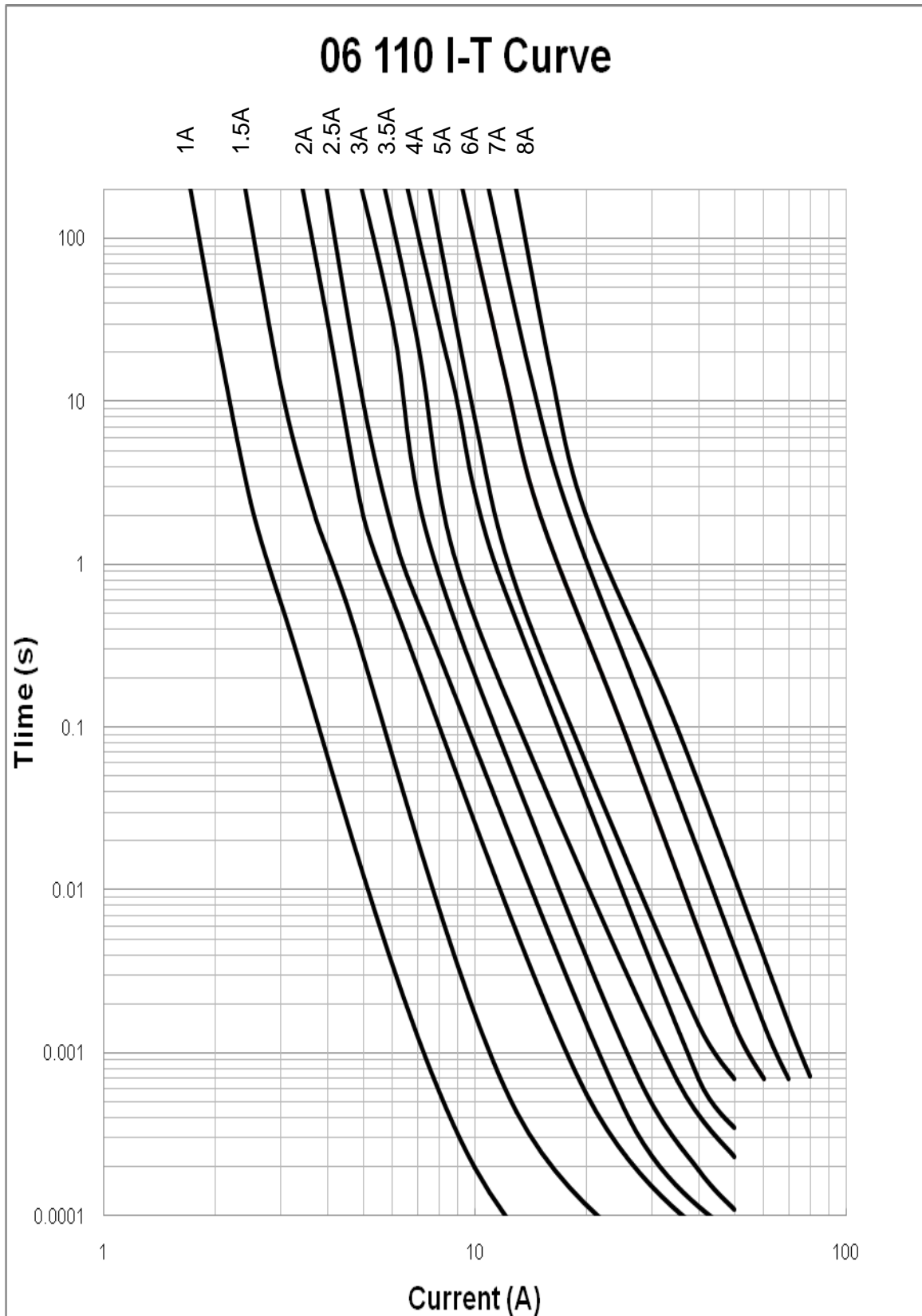
Specifications are subject to change without notice. Application testing is strongly recommended.

Dimension Drawing not to scale (Unit: mm/inch)



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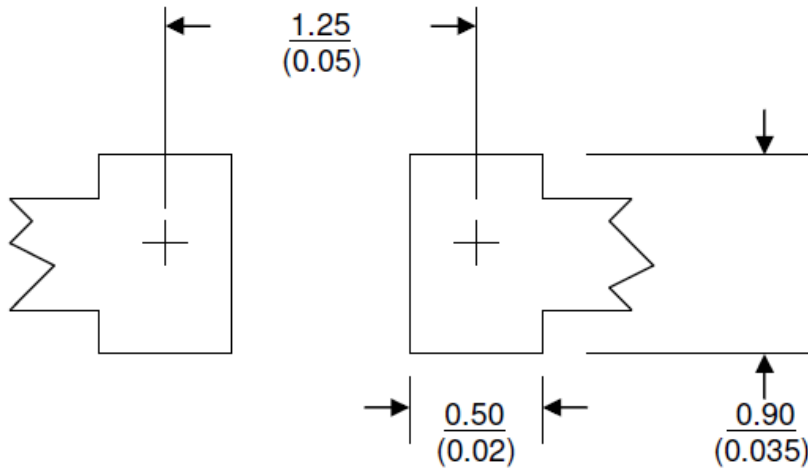


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Recommended land pattern

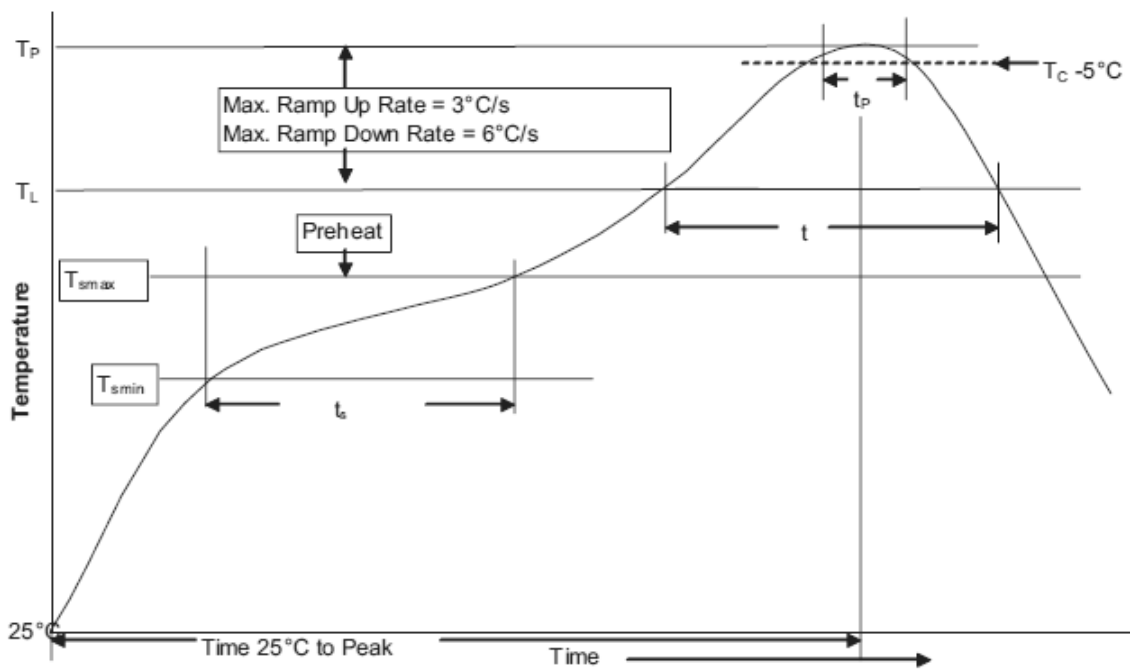


Unit: mm/inches

Soldering method

- Wave solder
 - Reservoir temperature: 260°C
 - Time in reservoir: 10 seconds maximum
- Infrared reflow
 - Temperature: 260°C
 - Time: 30 seconds maximum

Solder reflow profile



Profile Feature		Lead(Pb) free solder
Preheat and soak	<ul style="list-style-type: none"> • Temperature min.(T_{smin}) • Temperature max. (T_{smax}) • Time (T_{smin} to T_{smax}) (t_s) 	<ul style="list-style-type: none"> 150°C 200°C 60 - 120 Seconds

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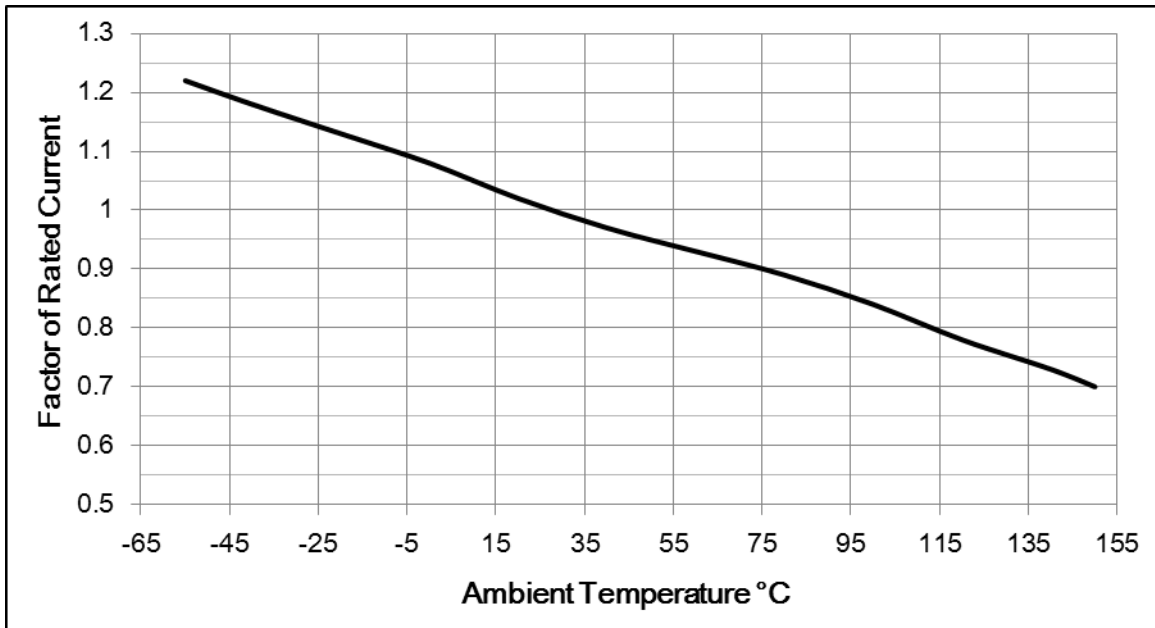


Average ramp up rate T_{smax} to T_p	3°C / Second Max.
Liquidous temperature (T_L)	217°C
Time at liquidous (t_L)	60 - 150 Seconds
Peak package body temperature (T_P)	260°C
Time (t_p) within 5°C of the specified classification temperature (T_C)	30 Seconds
Average ramp-down rate (T_P to T_{smax})	6°C / Second Max.
Time (25°C to Peak Temperature)	8 Minutes Max.

Temperature Derating Curve

Normal ambient temperature: 23+/-3°C

Operating temperature: -55 ~ 150°C, with proper correction factor applied



Package

5000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.

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