

INDIVIDUAL SPECIFICATION SHEET

Product Name: 1206 Fast Acting SMD Fuses

Part Number: F12F15

Revision: A



Dongguan TLC Electronic Technology Co., LTD

No.18,5th GaoLi Road,TangXia Town,DongGuan,GuangDong,P.R China 523710

TEL: 86-0769-3892 0511

FAX: 86-0769-8793 2077

Http: www.tlcet.com.cn

Rev.	Effective Date	Changed Contents
A	2021-3-22	New Release

☞ The individual specification sheet are the property of Dongguan TLC electronic technology Co.,Ltd and shall not be copied or used as commercial purposes without permission.

PREPEARED BY

APPROVED BY




Description

F12F 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	2.5In	3.5In
15A	4 hour min.	-	5 sec max.

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

Specifications

Specification							
Part No.	Rated Voltage DC	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 Marking
F12F15	32V	15A	150A@32Vdc	3.9	78	16.5	15

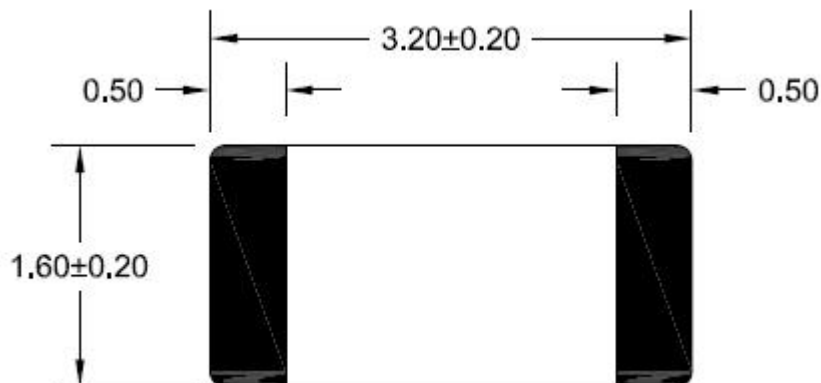
1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C
3. Typical Pre-arcing I²t are measured at 10In Current

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

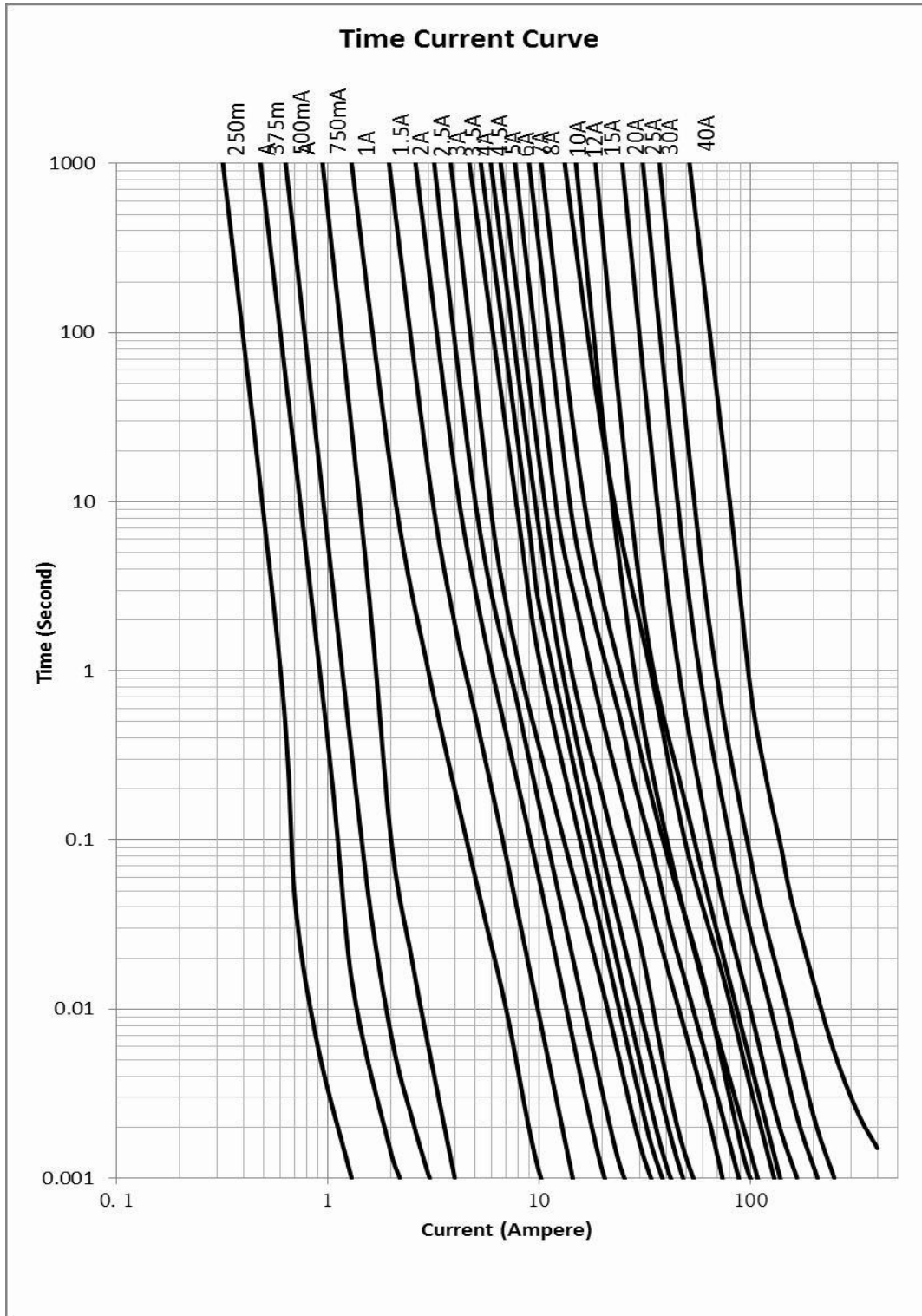
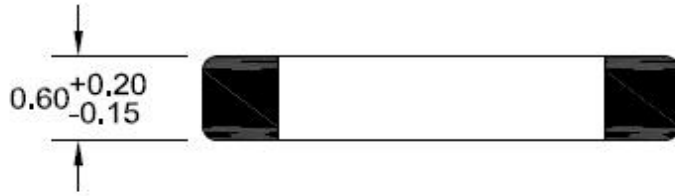
Dimension

Drawing not to scale (Unit: mm) Top

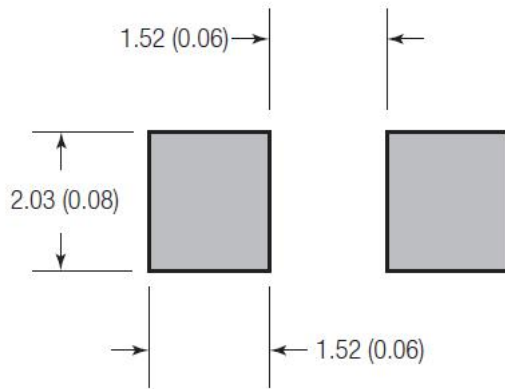
view



Side view: 1A~15A



Recommended land pattern

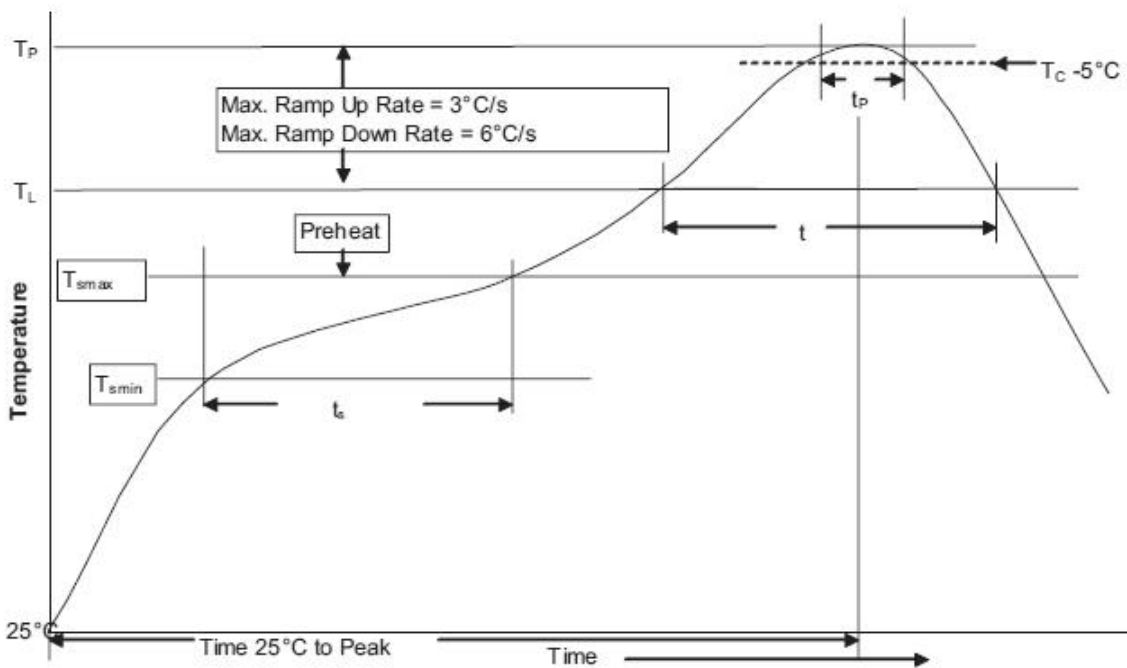


Unit: mm(inch)

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



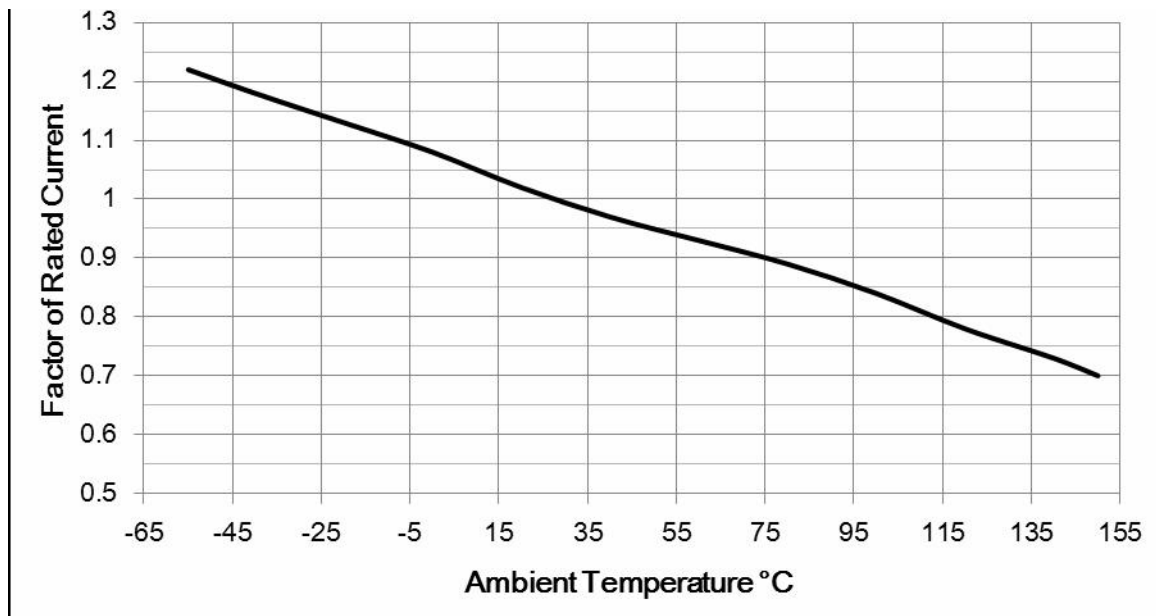
Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min. (T_{smin})	150°C
	• Temperature max. (T_{smax})	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60 - 120 Seconds

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 ~ 125°C, with proper correction factor applied



Package

3000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.

--- End of Document ---