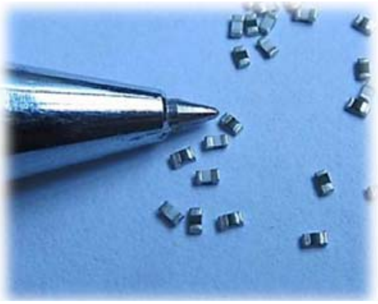


Description

04 100 Series Chip fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics and also makes our chip fuses more heat and shock tolerant than typical subminiature fuses

Electrical Characteristics			
Rated Current	1.0In	2.5In	3.0In
1A~4A	4 hour minimum	5 sec	
200mA~750mA	4 hour minimum		5sec

Features

- Fast acting for excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- One time positive disconnect
- Lead Free and Halogen free material

SPECIFICATIONS					
Product Code	Current Rating	Voltage Rating DC	Interrupting Rating*	Resistance (ohms)** Typ.	Typical Melt I^2t *** DC (A^2s)
04 100.0.2	200mA	32V	35A	1750	0.0006
04 100.0.25	250mA	32V	35A	1500	0.0010
04 100.0.315	315mA	32V	35A	1000	0.0014
04 100.0.375	375mA	32V	35A	780	0.0018
04 100.0.5	500mA	32V	35A	500	0.0043
04 100.0.75	750mA	32V	35A	220	0.011
04 100.1	1A	32V	35A	130	0.04
04 100.1.5	1.5A	32V	35A	78	0.06
04 100.2	2A	32V	35A	40	0.13
04 100.2.5	2.5A	32V	35A	24	0.20
04 100.3	3A	32V	35A	18	0.33
04 100.3.5	3.5A	32V	35A	14	0.45
04 100.4	4A	32V	35A	11	0.60

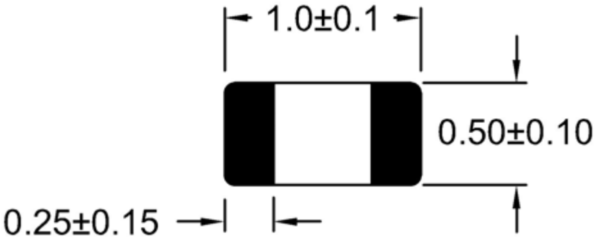
1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source);

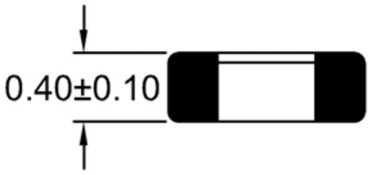
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 degrees;

3. Typical Melting I2t (Measured with a battery bank at rated DC voltage, Measured at 1ms open time, time constant of calibrated circuit less than 50 microseconds).

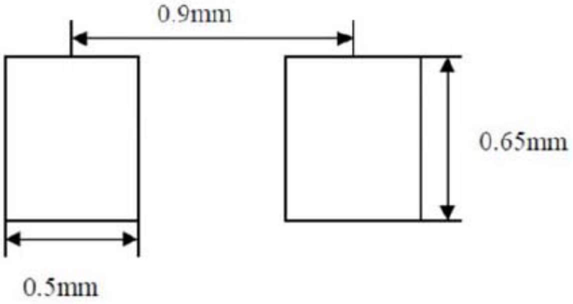
Dimension

Drawing not to scale (Unit: mm)





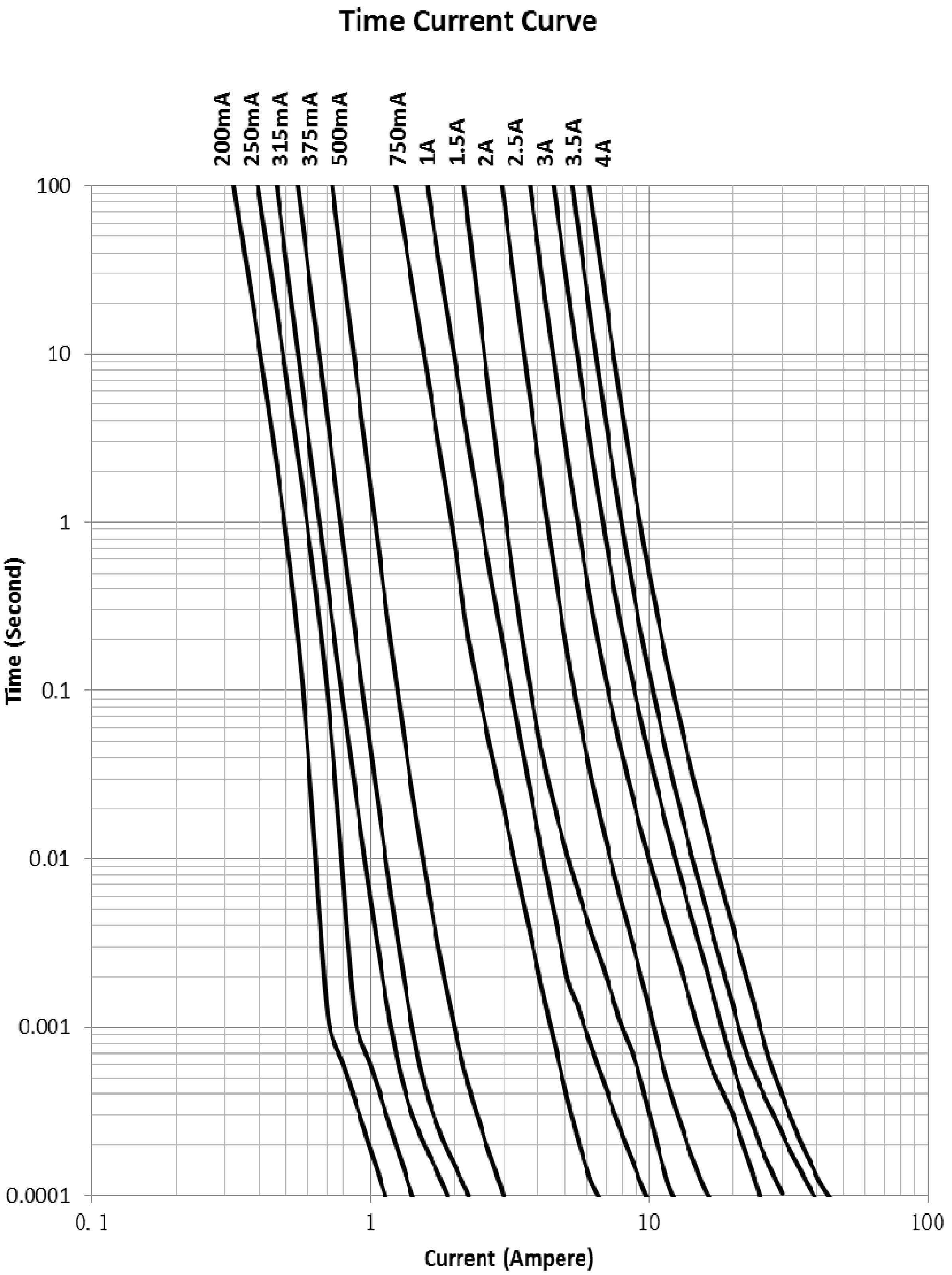
Recommended land pattern



Note: Print solder in thickness of 0.08mm to 0.10mm

注: 锡膏印刷厚度 0.08 毫米到 0.10 毫米

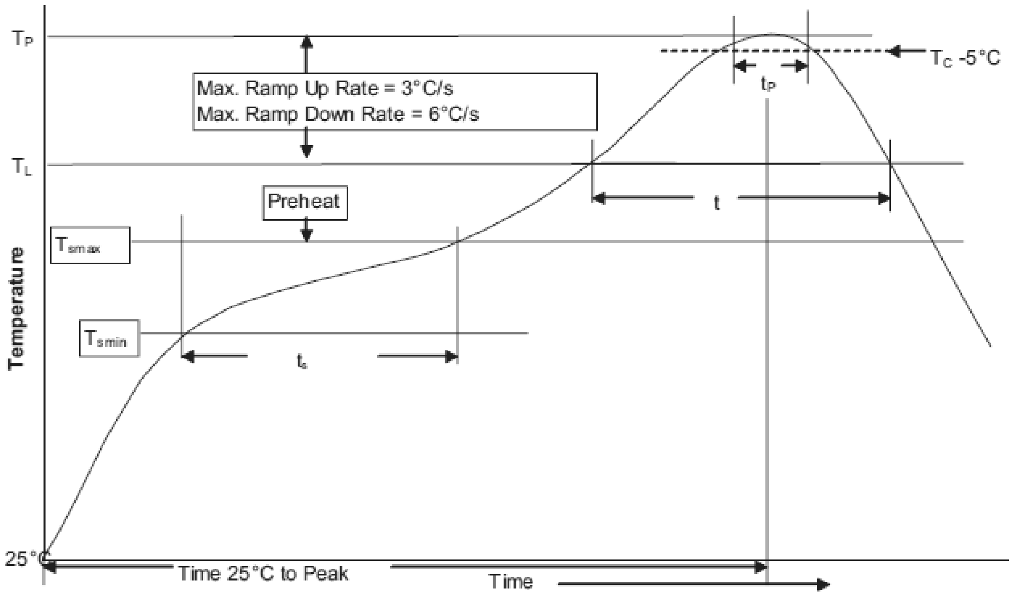
Unit: mm(inch)


Time Current Curve
200mA
250mA
315mA
375mA
500mA
750mA
1A
1.5A
2A
2.5A
3A
3.5A
4A
100
10
1
0.1
0.01
0.001
0.0001
Time (Second)
0. 1
1
10
100
Current (Ampere)

Soldering method

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

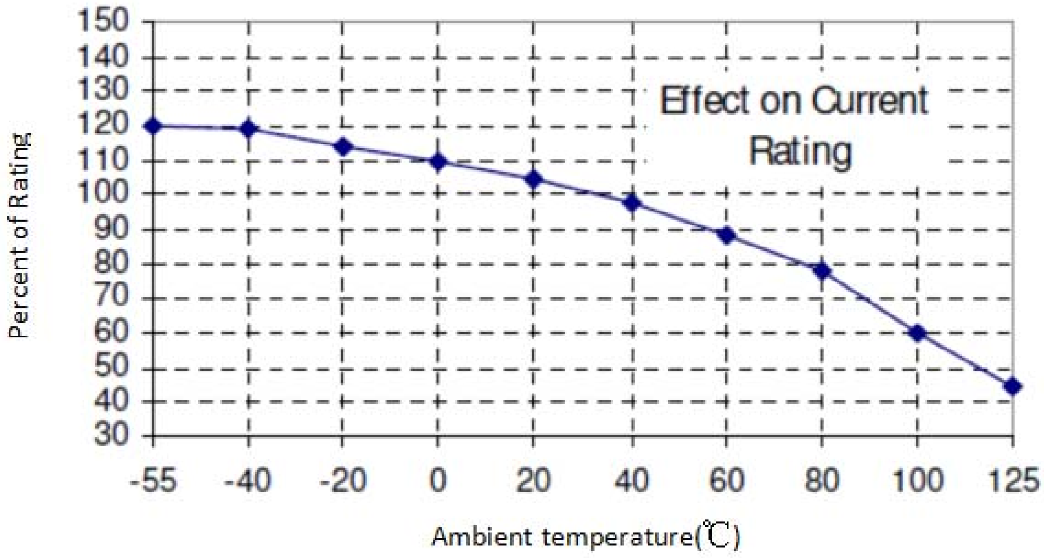
Solder reflow profile



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

Temperature Derating Curve

- Normal ambient temperature: 23+/-3℃
- Operating temperature: -55 ~ 125℃, with proper correction factor applied



Package

- 10000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.