



贝特卫士®

更好的电路安全卫士!
You build electronics, We safeguard them!

承 认 书

APPROVAL SHEET

编号 No.	0641150000-A/5-B
日期 Date	2021.08.12

客 户 Customer	
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品 名 Product	0603 Size Chip Fuse
系 列 Series	064 series

料号 Part No.	规格描述 Specification	备注 Remark
贝特电子 Betterfuse	0603 Size Fast Acting current fuse	
客 户 Customer		

环保特别提示 Special instructions for environmental protection
本产品:

供应商-贝特电子 Supplier-Betterfuse	零件承认章 Approval Signet	客 户 Customer	零件承认章 Approval Signet
制 作 Make			
审 核 Check			
确 认 Approval			

联络 Contact			
业务 Sales	电话 Telephone	手机 Cellphone	邮箱 E-mail
零件承认后敬请回签一份给我司留存, 或将承认后的封面传真(0769-8352 1857)至我司, 谢谢!			



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No.	Date	Modified Content	Page	Edition	Prepared/modified by	Checked by
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2	2016.09.22	Add the AECQ200 description		A/1	Jeffery	WenQiang Luo
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1. SCOPE AND DESCRIPTION



Following electronic product specifications apply to chip fuses of the 064 series. The 064 series is a fast-Acting type chip fuse for over-current protection.

With their small size and layout, 064 chip fuses are ideal for industrial products. They are widely used in cellphones, DVD players, battery packs, hard disk drives and digital cameras.

2. GENERAL INFORMATION


General Description

The 064 chip 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 chip fuses more heat and shock tolerant than typical subminiature fuses.

Detailed Features

- Pass the AEC-Q200 automotive grade certified
- Compatible with reflow and wave soldering
- Excellent environmental integrity
- Lead-free, Halogen-free, RoHS compliant
- Designed to UL 248-14

3. AGENCY APPROVALS

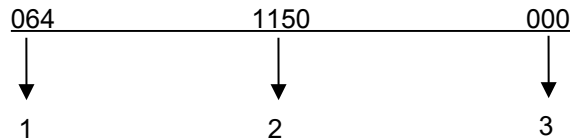
Agency	Agency File Number	Ampere/ Voltage Range
	E300003	63VDC : 100mA~5A 32VDC : 100mA~5A



4. PART NUMBERING SYSTEM

4.1 Part Number

Example: 0641150000



- 1 .Product Series 064
- 2 .Ampere Rating 1.5A (see table 4.3 below)
- 3 .Supplementary Code See table 4.2 below

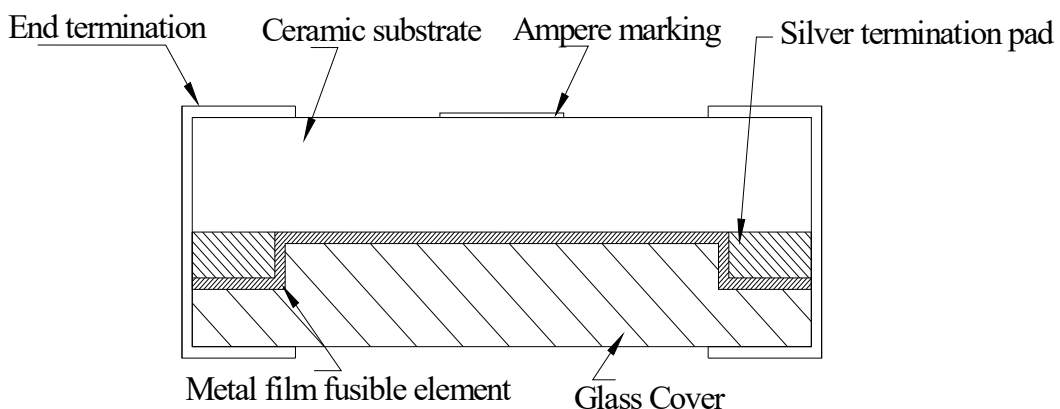
4.2 Supplementary Code Table

CODE	DESIGNATION
000	Tape-and-reel

4.3. Ampere / Voltage Rating Table

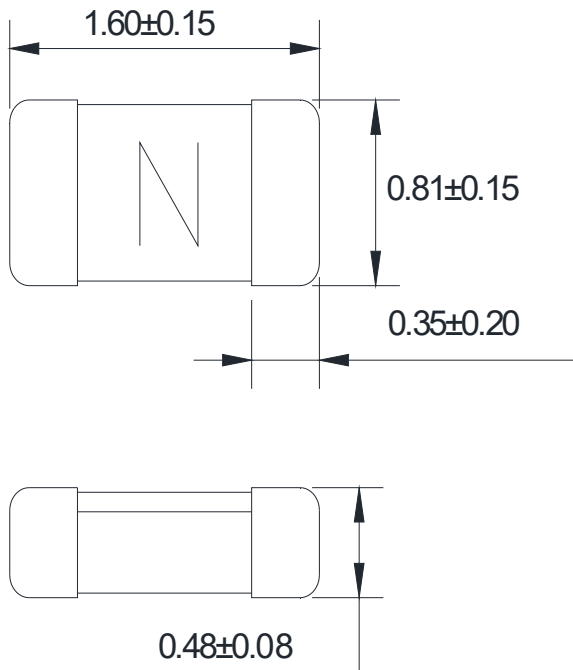
AMP CODE	AMPERE RATING	VOLTAGE RATING
0250	250mA	63V/32V DC
0375	375mA	63V/32V DC
0500	500mA	63V/32V DC
0750	750mA	63V/32V DC
1100	1.00A	63V/32V DC
1150	1.50A	63V/32V DC
1200	2.00A	63V/32V DC
1250	2.50A	63V/32V DC
1300	3.00A	63V/32V DC
1350	3.50A	63V/32V DC
1400	4.00A	63V/32V DC
1500	5.00A	63V/32V DC

5. MECHANICAL SPECIFICATIONS

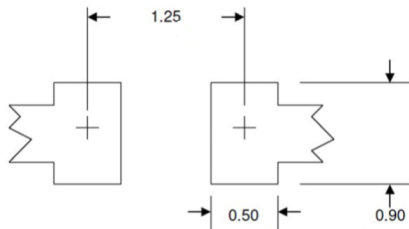




Dimensions (unit: mm)



Recommended Land Pattern
unit: mm)



Operating Temperature:

-55°C to +150°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 (60068-6)

10-60Hz at 0.75mm amplitude

60-2000Hz at 10g acceleration

6. ELECTRICAL SPECIFICATIONS

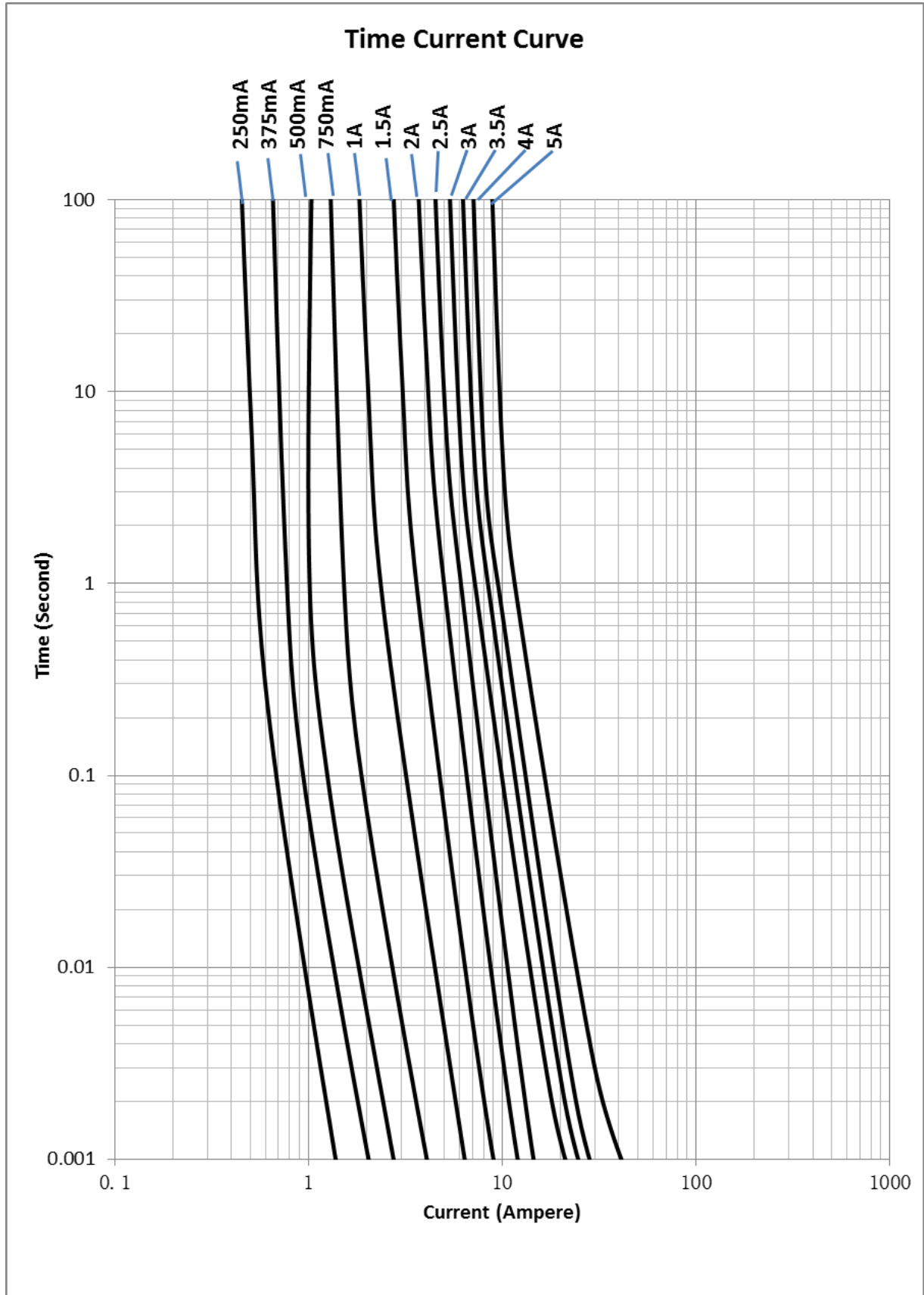
Time vs Current Characteristics Table

(measured with constant current power supply)

Time vs Current Characteristics: UL248-14		
Rated Current	100%	250%
250mA~5A	>4H	<5s



Average Time Current (I-T) Curves





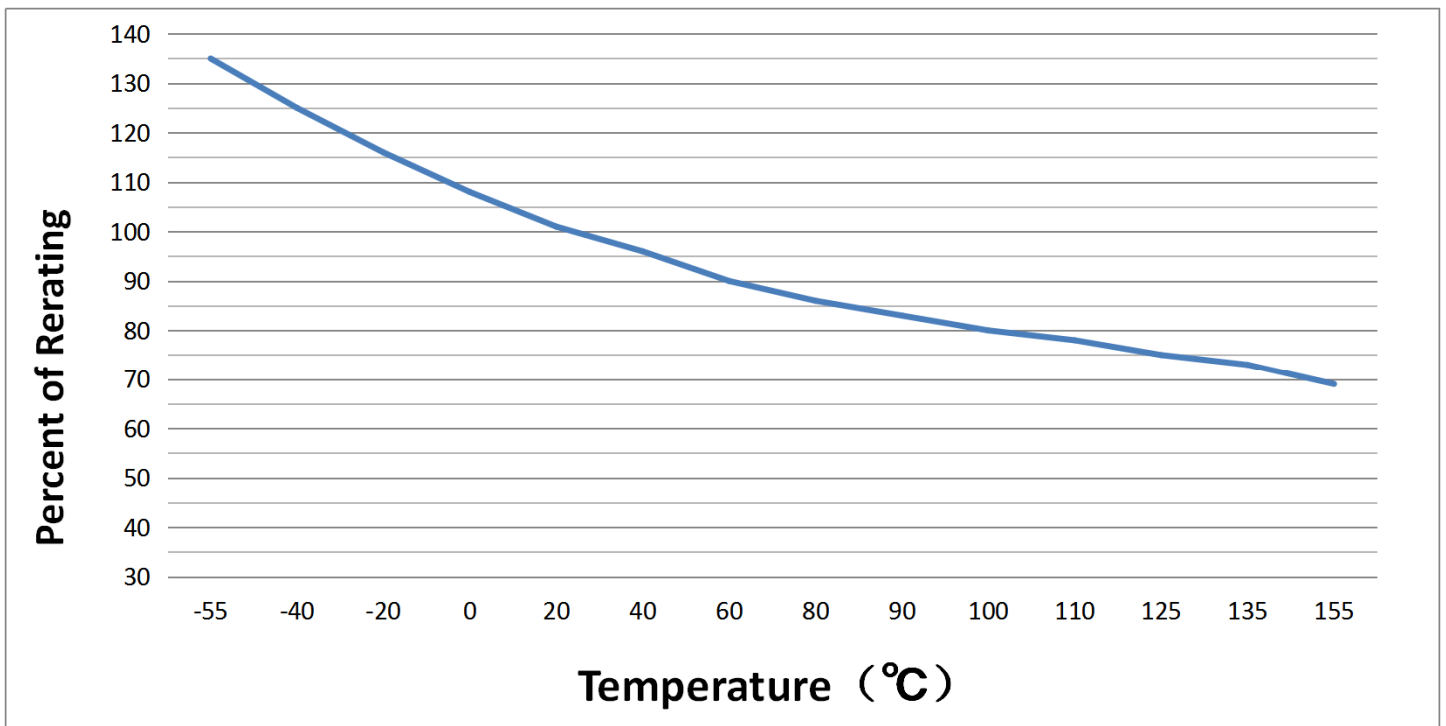
Electrical characteristics

Electrical Characteristics at 25°C								
Amp Code	Rated Current	Rated Voltage	Typical Voltage Drop(mV)	Breaking Capacity	Typical Melting I ² T (A ² s)	Typical Cold Resistance (mΩ)	Alpha Mark	Approvals
								cURus
0250	250mA	63VDC 32VDC	890	50A@63VDC 50A@32VDC	0.0004	3200	D	●
0375	375mA		585		0.0009	1650	E	●
0500	500mA		580		0.001	1000	F	●
0750	750mA		425		0.009	450	G	●
1100	1.00A		333		0.01	249.5	H	●
1150	1.50A		268		0.04	149	K	●
1200	2.00A		158		0.115	73.5	N	●
1250	2.50A		143		0.14	46.5	O	●
1300	3.00A		128		0.28	34.5	P	●
1350	3.50A		125		0.5	26.5	R	●
1400	4.00A		118		0.6	20.5	S	●
1500	5.00A		105		1.9	13.0	T	●

- Note:** (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 10I_n current

Temperature Derating Curve

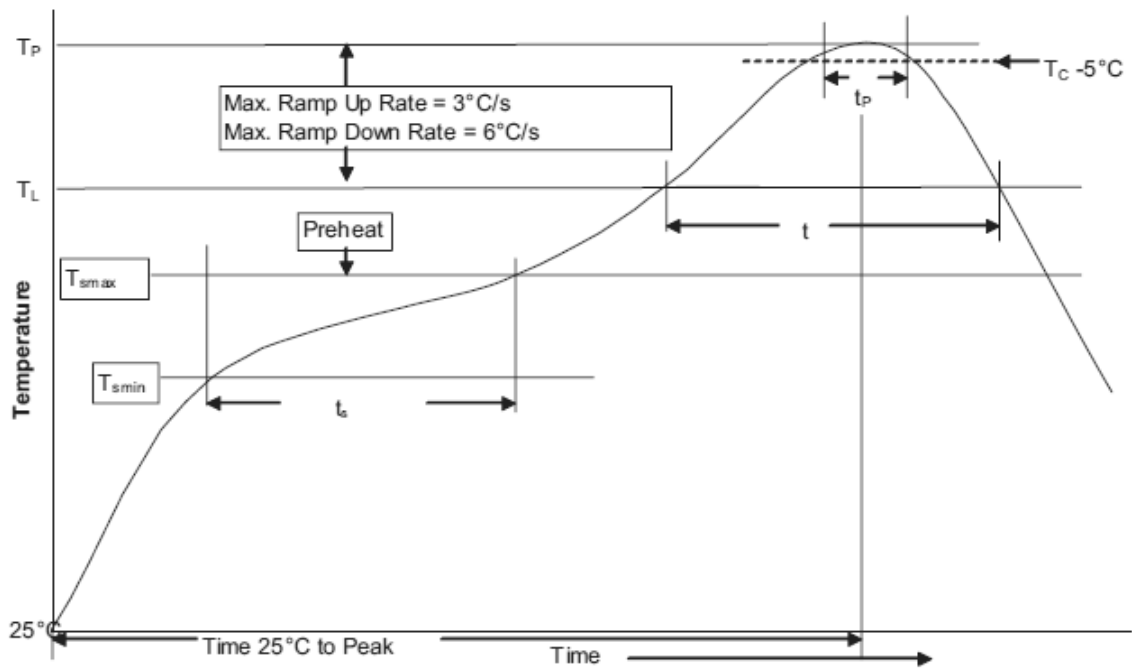
- (1) Normal ambient temperature: 23+/-3°C
 (2) Operating temperature: -55 ~ +150°C, with proper correction factor applied



Ambient temperature(°C)



7.SOLDERING PARAMETERS



1.Infrared Reflow:

Temperature:260°C

Time:30 sec. Max.

2.Wave Soldering

Reservoir Temperature:260°C

Time in Reservoir:10 sec. Max.

Profile Feature		Lead (Pb)free solder
Average Ramp-UP Rate (T _{smax} to T _p)		3°C/s Max.
Preheat and soak	Temperature min.(T _{smin})	150°C
	Temperature max.(T _{smax})	200°C
	Time (T _{smin} to T _{smax})(t _s)	60~120s
Liquidous temperature(T _L)		217°C
Time at liquidous(t _L)		60~150S
Peak package body temperature(T _p)		260°C
Time (t _p) within 5°C of the specified classification temperature (T _c)		30S
Average ramp-down rate (T _p to T _{smax})		6°C/s Max.
Time (25°C to Peak Temperature)		8 Minutes Max.

8.ORDERING INFORMATION

The following information are necessary in order to place your order with us correctly:

Series	Amp Code	Supplementary Code	Qty
064			

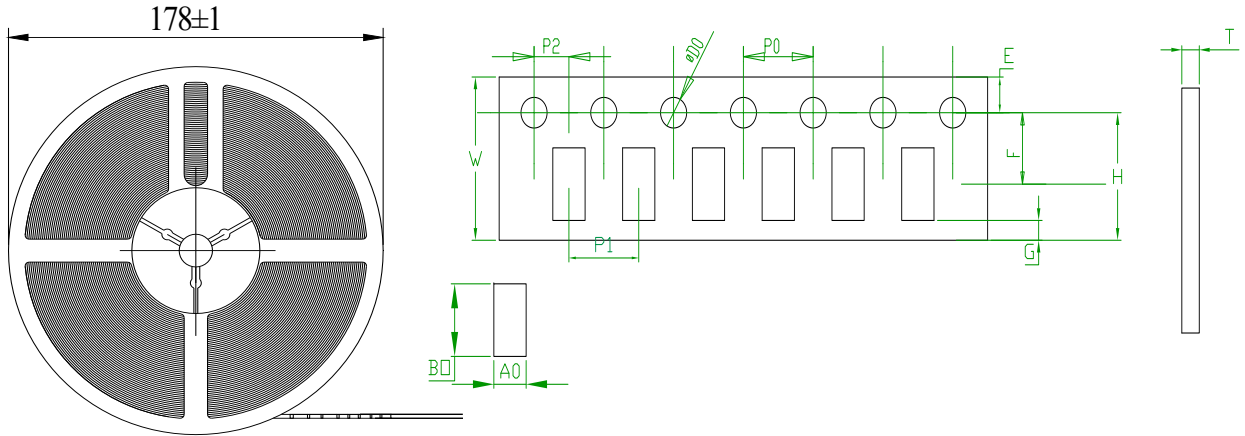


9.PACKING INFORMATION

Taping details

Packing

Unit:mm



A0	B0	D0	E	P1	P2	T	G	F	P0	H	W
1.10±0.05	1.90±0.05	1.50±0.05	1.75±0.10	4.00±0.1	2.00±0.05	0.60±0.05	0.75 Min	3.50±0.05	4.00±0.10	6.25±0.30	8.00±0.20

Quantity Per Reel	Quantity Carton Box
5000 pcs	50000pcs

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