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3	2015.08.04	Update UR certification		B/2	Jeffery	Gem Guo
4	2015.11.12	Add the packing quantity	9	B/3	Jeffery	Lin Gao
5	2016.01.28	Update the soldering curve		B/4	Jeffery	Lin Gao
6	2020.06.07	Update temperature derating chart		B/5	YaLan Wang	Fei Gao
7	2020.07.12	Update content		C/0	YaLan Wang	Fei Gao
8						
9						
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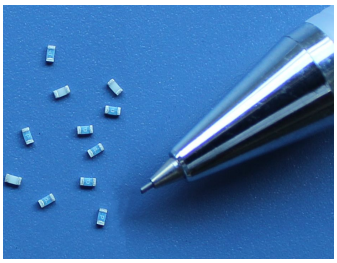
1. SCOPE AND DESCRIPTION



Following electronic product specifications apply to chip fuses of the 063 series. The 063 series is a Time-Lag type chip fuse for over-current protection.

With their small size and layout, 063 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 063 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

- High inrush current withstanding capability
- Compatible with reflow and wave solder
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead-free, Halogen-free, RoHS compliant
- Designed compliant to UL 248-14
- Standard AEC-Q200 Automotive Grade Certified

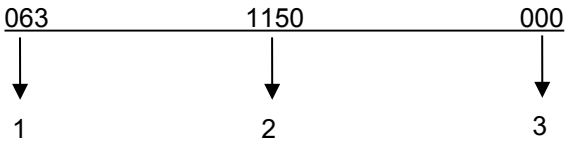
3. AGENCY APPROVALS

Agency	Agency File Number	Ampere/ Voltage Range
c UL us	E300003	32VDC:1A~5A

4. PART NUMBERING SYSTEM

4.1 Part Number

Example: 0631150000



1 .Product Series …….... 063
2 .Ampere Rating …….... 1.5A (see table 4.3 below)
3 .Supplementary Code ……. See table 4.2 below

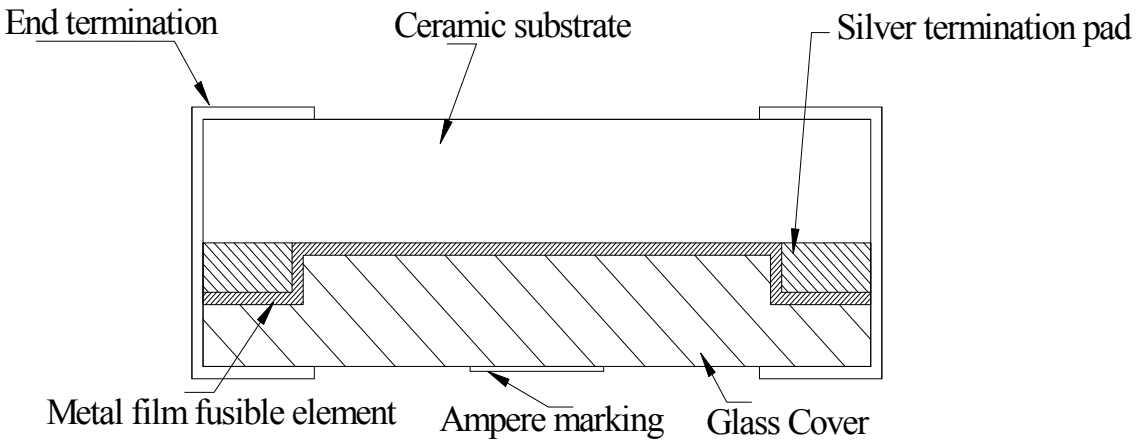
4.2 Supplementary Code Table

CODE	DESIGNATION
000	Tape-and-reel

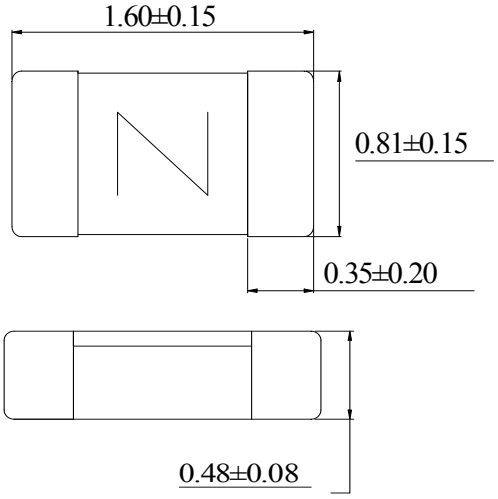
4.3. Ampere Rating Table

AMP CODE	AMPERE RATING	VOLTAGE RATING
1100	1.00A	32V DC
1150	1.50A	32V DC
1200	2.00A	32V DC
1250	2.50A	32V DC
1300	3.00A	32V DC
1350	3.50A	32V DC
1400	4.00A	32V DC
1500	5.00A	32V DC

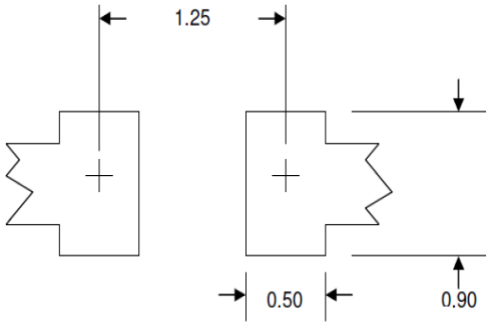
5. MECHANICAL SPECIFICATIONS



Dimensions (unit: mm)



Recommended land pattern



Operating Temperature:

-55°C to150°C

Storage Conditions:

+10℃ to +60℃

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

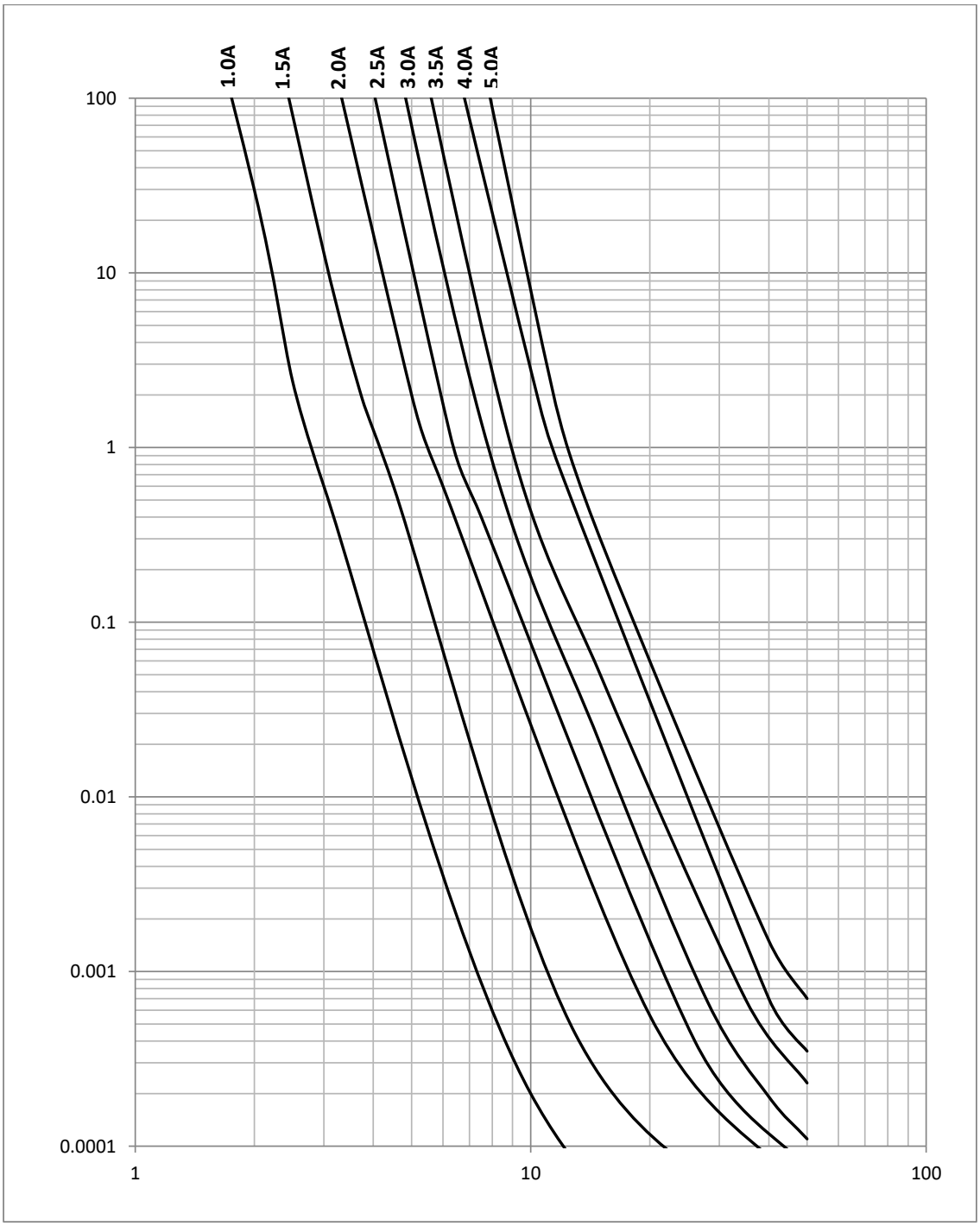
6. ELECTRICAL SPECIFICATIONS

Time vs Current Characteristics Table

(measured with constant current power supply)

Time vs Current Characteristics: UL248-14			
Rated current	100%	200%	250%
1A~5A	>4h	1s~60s	<5s

Average Time Current (I-T) Curves

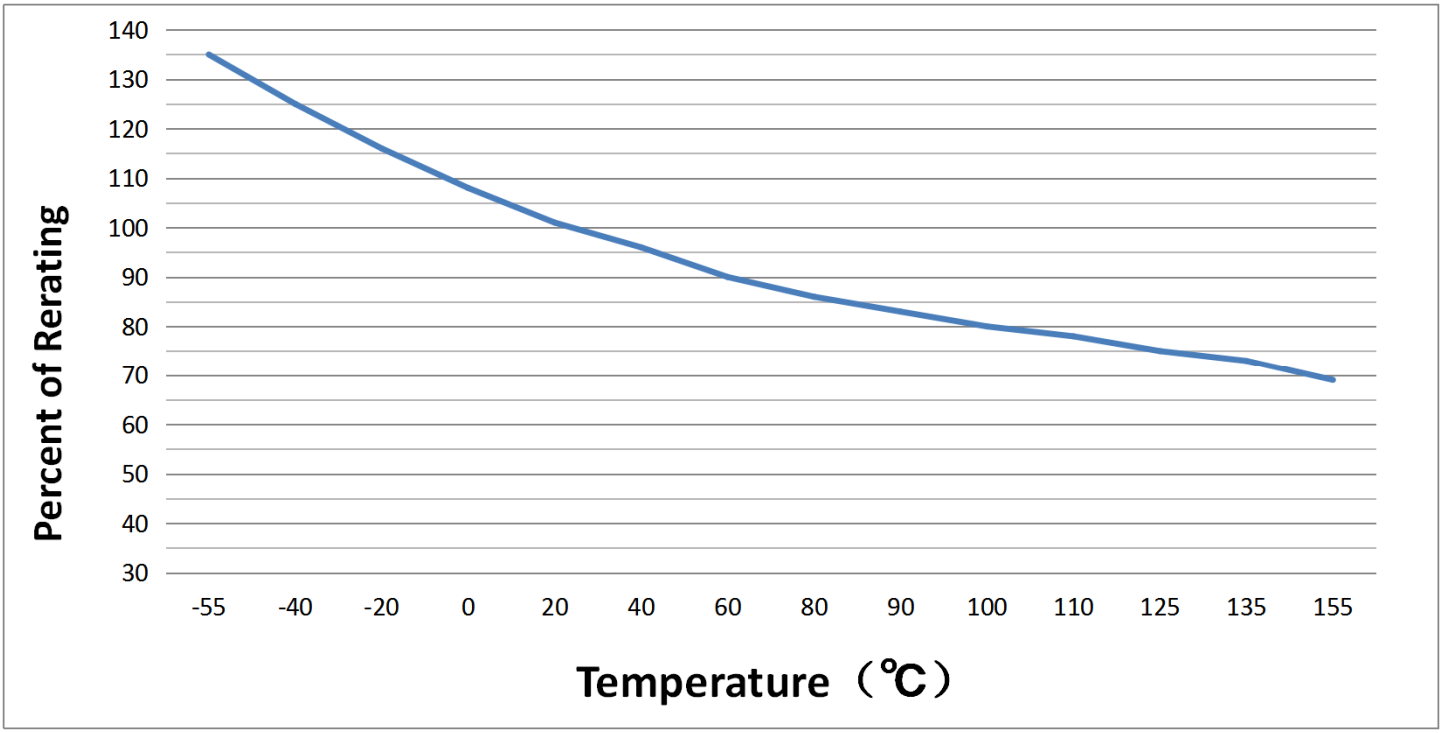


Electrical Characteristics

Electrial Characteristics at 25℃								
Amp Code	Rated Current	Rated Voltage	Typical Voltage Drop(mV)	Breaking Capacity	Typical Melting I²T (A²s)	Typical Cold Resistance (mΩ)	Alpha Mark	Approvals
								cURus
1100	1.00A	32VDC	325	50A@32VDC	0.015	248	H	•
1150	1.50A		255		0.05	145	K	•
1200	2.00A		150		0.125	74	N	•
1250	2.50A		135		0.14	54	O	•
1300	3.00A		120		0.35	35	P	•
1350	3.50A		125		0.62	27.5	R	•
1400	4.00A		110		0.81	20.5	S	•
1500	5.00A		103		2.0	12.75	T	•

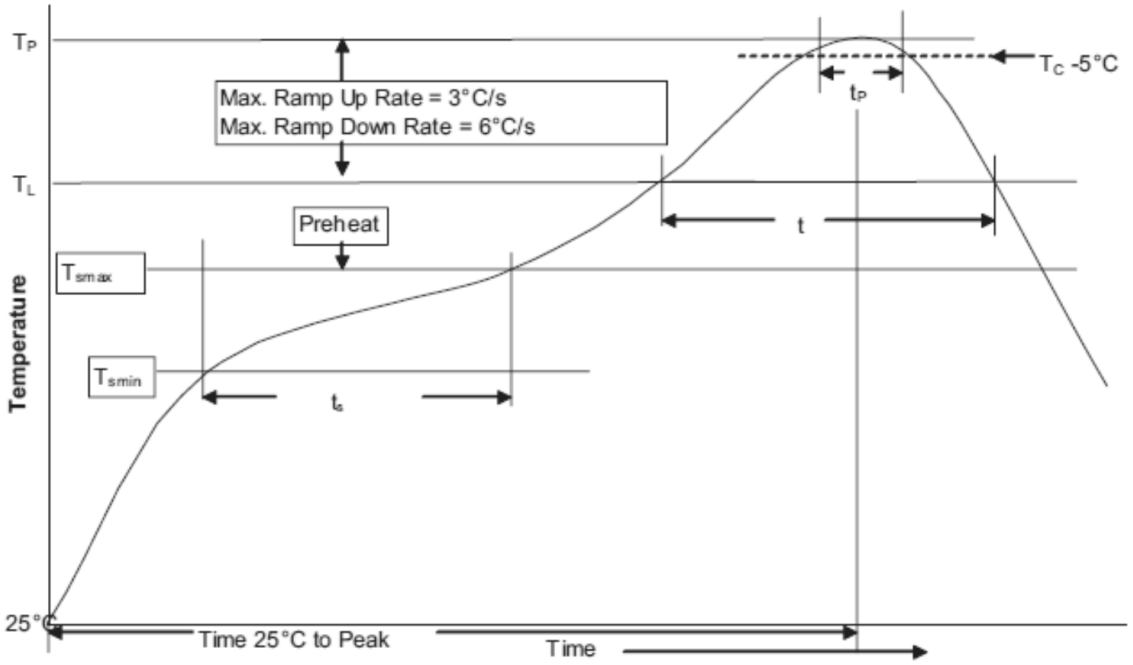
1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees
3. Typical Pre-arcing I^2t are measured at 10In Current

Temperature Rerating Curve



Normal ambient temperature: 23+/-3℃
Operating temperature: -55 ~ 150℃, with proper correction factor applied

7. SOLDERING PARAMETERS



1.Infrared Reflow:
Temperature: 260℃
Time: 30S
Recommend reflow profile

2.Wave Soldering
Reservoir Temperature: 260℃
Time in Reservoir: 10sec Max.

Profile Feature		Lead (Pb)free solder
Average Ramp-UP Rate（Tsmax to Tp)		3℃/s Max.
Preheat and soak	Temperature min.(Tsmin)	150℃
	Temperature max.(Tsmax)	200℃
	Time (Tsmin to Tsmax)(ts)	60~120s
Liquidous temperature(TL) Time at liquidous(tL)		217℃ 60~150S
Peak package body temperature(Tp)		260℃
Time (t_P) within 5℃ of the specified classification temperature (Tc)		30S
Average ramp-down rate (Tp to Tsmax)		6℃/s Max.
Time (25℃ to Peak Temperature)		8 Minutes Max.

8. ORDERING INFORMATION

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

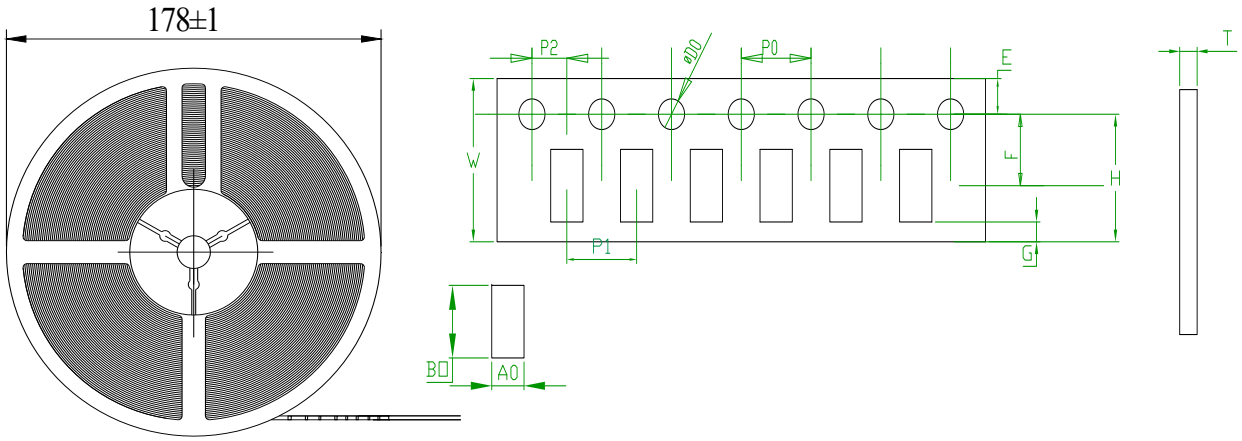
Series No.	Amp Code	Packaging Code	Quantity	Purchase Order No.
063				

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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