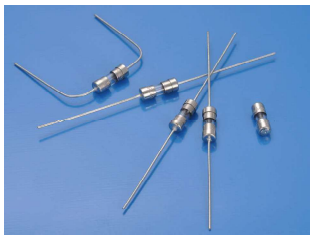
1. SCOPE AND DESCRIPTION



Following electronic product specifications apply to fuses of the 331 series. The 331 series is a quick-acting type subminiature fuse for over-current protection.

With the good electrical capacity, this series fuses are ideally for lighting, power supply and adapter applications to provide individual protection for components or internal circuit.

2. GENERAL INFORMATION

General Description

331 series quick-acting fuse with low breaking capacity for use with printed circuit boards is used in a large variety of applications. The 3.6x10mm device is constructed as a glass tube with electro-plated brass end caps. The 331 series with 250 VAC rating and 35A or 10In (10 times of rated current) breaking capacity, offers excellent quality and is 100% tested for cold resistance and precise length.

Detailed Features

- Subminiature fuse with quick-acting, low breaking capacity
- 3.6mmX10mm physical dimensions
- Glass tube, encapsulated design with nickel - plated brass end caps
- Optional axial leads are Φ0.65mm @ 250mA~7A and Φ0.8mm @ 8A~10A
- Protection against harmful over-currents in primary and secondary applications.
- Lead-free, Halogen-free, RoHS compliant
- Designed compliant to IEC60127-3/III

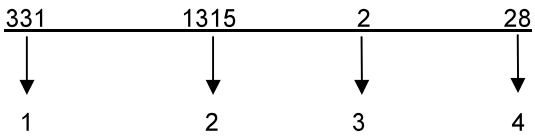
3. AGENCY APPROVALS

Agency	Agency File Number	Ampere/ Voltage Range
c UL us	E300003	125VAC/ 250VAC: 250mA~10A
PS E	PSE15020939	250V: 1A; 1.25A; 1.6A; 2.5A; 3.15A; 4A; 5A
	J 50158635	250V AC: 500mA; 630mA; 800mA; 1A; 1.6A; 2A; 2.5A; 3.15A; 4A; 5A; 6.3A
CQC	CQC09012037446	250V: 500mA; 630mA; 800mA; 1A; 1.6A; 2A; 2.5A; 3.15A; 4A; 5A; 6.3A

4. PART NUMBERING SYSTEM

4.1 Part Number

Example: 3311315228



1 .Product Series	331
2 .Ampere Rating/ Code	3.15A (see table 4.3 below)
3 .Voltage Rating	2 – 250V 1 – 125V
4 .Packaging Code	(see table 4.2 below)

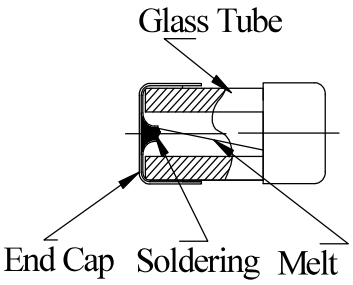
4.2 Packaging Code Table

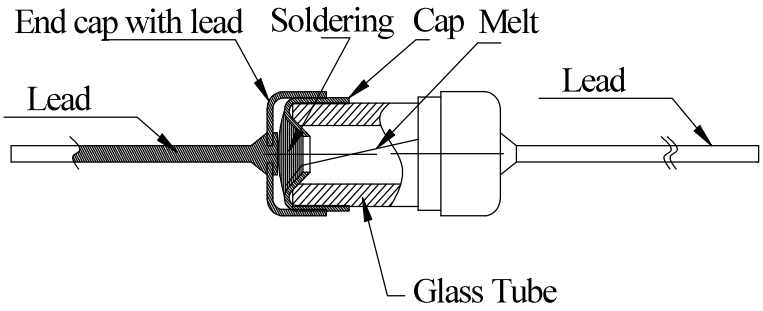
CODE	DESIGNATION
00	No marking, 30mm leads
01	Marking, 30mm leads
02	No marking, 45mm leads
03	Without leads
⋮	
28	Bending and shearing leads

4.3. Ampere Rating Table

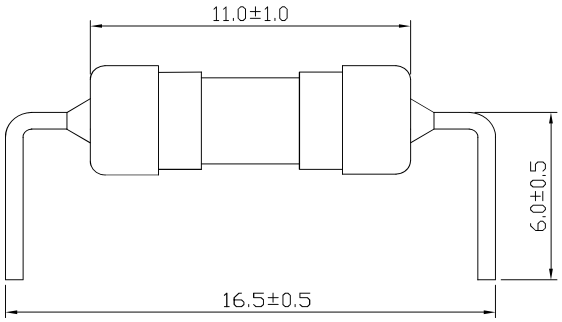
AMP CODE	CURRENT RATING	VOLTAGE RATING
0250	250mA	125V/250V
0300	300mA	125V/250V
0315	315mA	125V/250V
0350	350mA	125V/250V
0375	375mA	125V/250V
0400	400mA	125V/250V
0500	500mA	125V/250V
0630	630mA	125V/250V
0750	750mA	125V/250V
0800	800mA	125V/250V
1100	1.00A	125V/250V
1125	1.25A	125V/250V
1150	1.50A	125V/250V
1160	1.60A	125V/250V
1200	2.00A	125V/250V
1250	2.50A	125V/250V
1300	3.00A	125V/250V
1315	3.15A	125V/250V
1350	3.50A	125V/250V
1400	4.00A	125V/250V
1500	5.00A	125V/250V
1630	6.30A	125V/250V
1700	7.00A	125V/250V
1800	8.00A	125V/250V
2100	10.00A	125V/250V

5. MECHANICAL SPECIFICATIONS





Dimensions (units: mm)



★:
250mA～7A： Φ0.65mm
8A～10A： Φ0.80mm

Operating Temperature:

-55°C to 125°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

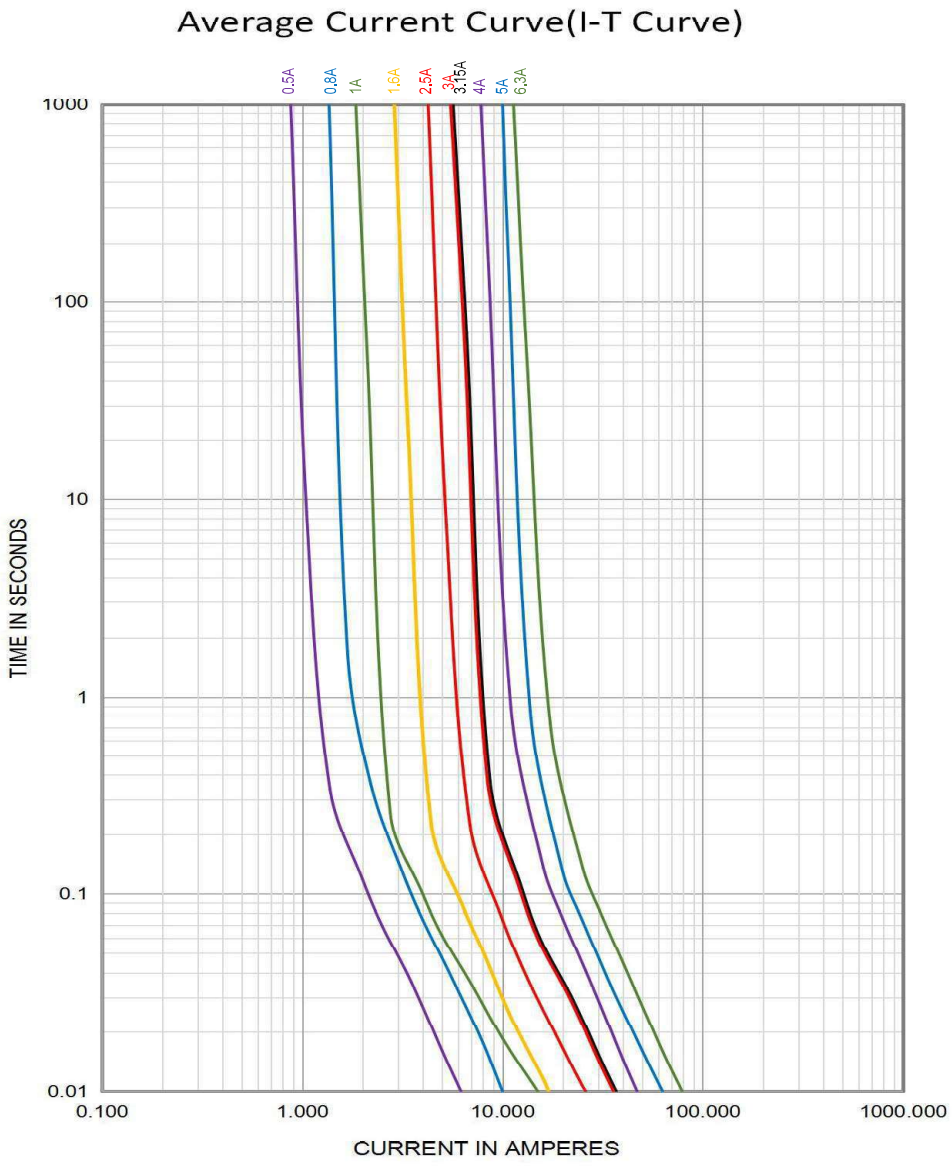
6. ELECTRICAL SPECIFICATIONS

Time vs Current Characteristics Table

(measured with constant current power supply)

Time vs Current Characteristics: IEC-60127-3/III					
Rated current	150%	210%	275%	400%	1000%
250mA~10A	>1h	<30min	10ms~3s	3ms~300ms	≤20ms

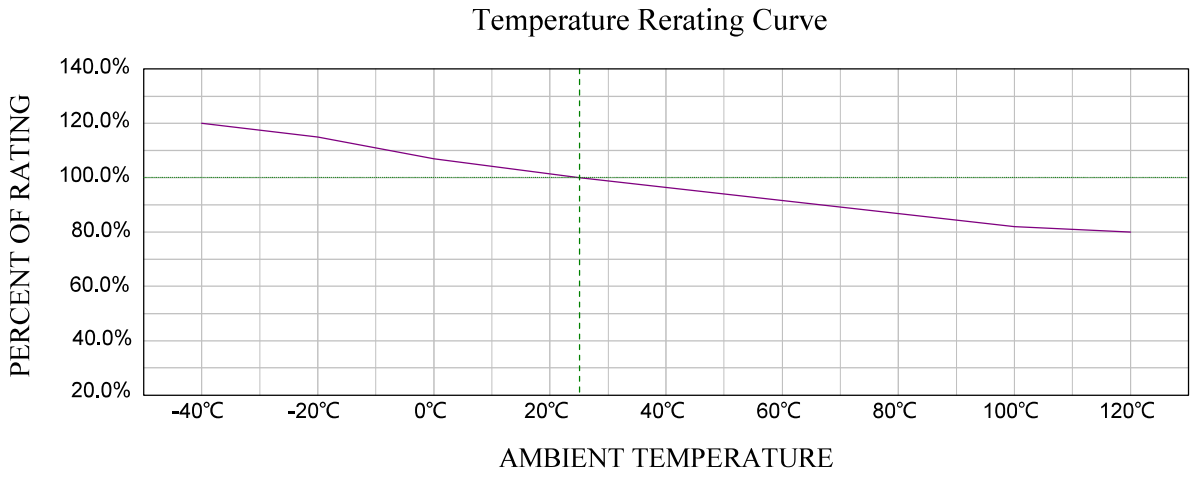
Average Time Current (I-T) Curves



Electrical characteristics

Electrical Characteristics										
Amp Code	Rated Current	Voltage drop Max (mV)	Power Dissipation max (mW)	Nominal Melting I²t(A²sec)	Breaking Capacity	Approvals				
						PSE	TUV	CQC	cURus	
						250V	250V	250V	125V	250V
0250	250mA	440	289	0.093	50A/125V AC 35A or 10In/250VAC 50-60Hz Cosφ=1.0	○	○	○	●	●
0300	300mA	420	331	0.131		○	○	○	●	●
0315	315mA	400	331	0.152		○	○	○	●	●
0350	350mA	390	331	0.172		○	○	○	●	●
0375	375mA	380	389	0.203		○	○	○	●	●
0400	400mA	370	389	0.23		○	○	○	●	●
0500	500mA	350	459	0.384		○	●	●	●	●
0630	630mA	320	529	0.656		○	●	●	●	●
0750	750mA	310	630	0.941		○	○	○	●	●
0800	800mA	300	630	1		○	●	●	●	●
1100	1.00A	280	375	2.25		●	●	●	●	●
1125	1.25A	280	919	2.57		●	○	○	●	●
1150	1.50A	250	1050	2.77		○	○	○	●	●
1160	1.60A	250	1050	2.89		●	●	●	●	●
1200	2.00A	240	1260	2.25		●	●	●	●	●
1250	2.50A	200	1313	6.75		●	●	●	●	●
1300	3.00A	180	1488	12.86		○	○	○	●	●
1315	3.15A	180	1488	13.69		●	●	●	●	●
1350	3.50A	170	1488	16.05		○	○	○	●	●
1400	4.00A	160	1680	22.09		●	●	●	●	●
1500	5.00A	150	1969	39.69		●	●	●	●	●
1630	6.30A	150	1969	62.41		○	●	●	●	●
1700	7.00A	150	1969	72.25	50A/125V AC Cosφ=1.0 50A/250V AC Cosφ=1.0	○	○	○	●	●
1800	8.00A	150	1969	92.16		○	○	○	●	●
2100	10.00A	150	1969	156.3		○	○	○	●	●

Temperature Rerating Curve



$$\text{Calculation for ideal fuse selection} = \frac{\text{Operating Current (A)}}{\text{Rating (\%} \times 0.75)}$$

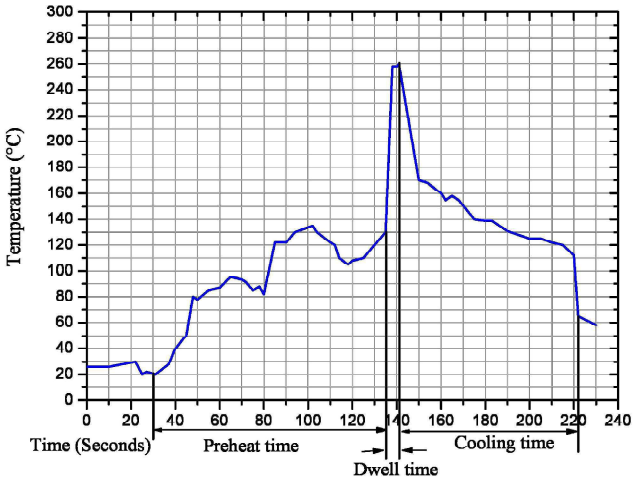
7.SOLDERING PARAMETERS

260℃.≤5 sec (Wave Soldering)

350℃.≤3 sec (Hand Soldering)

Soldering Peak:

260℃ - 10 sec (IEC 60068-20)



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.
331				