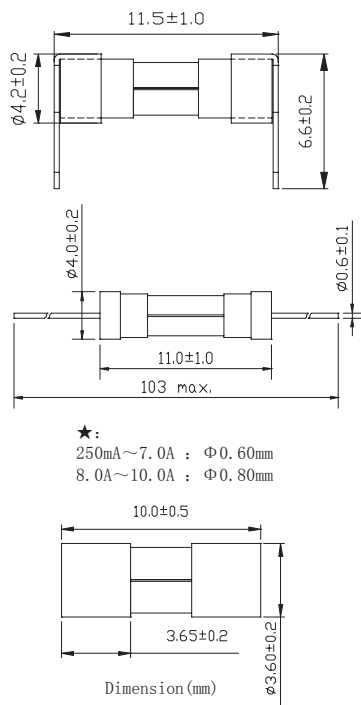


### 3.6\*10mm / NO. 332

### Time-Lag Glass Tube Fuse with Pig-Tail Series

玻璃管慢熔断保险管(带引线帽)



#### Time-Current Characteristic(时间—电流特性)

Time-Lag (T)

#### Standard(标准)

IEC-60127-3/IV

#### Materials(物料)

Tube: Glass Tube

End Caps: Nickel-plated brass

Axial Leads: Nickel-plated caps

Nickel-plated copper wires

#### Operating Temperature(工作温度)

-25 °C to +85 °C (consider de-rating)

#### Stock Conditions(贮存条件)

+10 °C to +60 °C

relative humidity ≤75% yearly average,  
without dew, maximum value for 30days-95%.

#### Vibration Resistance(振荡承载能力)

24 cycles at 15 min. each (EN 60068-6)

10-60Hz at 0.75mm amplitude

60-2000Hz at 10g acceleration

#### Solderability(可焊性)

260 °C, ≤3 sec. (Wave)

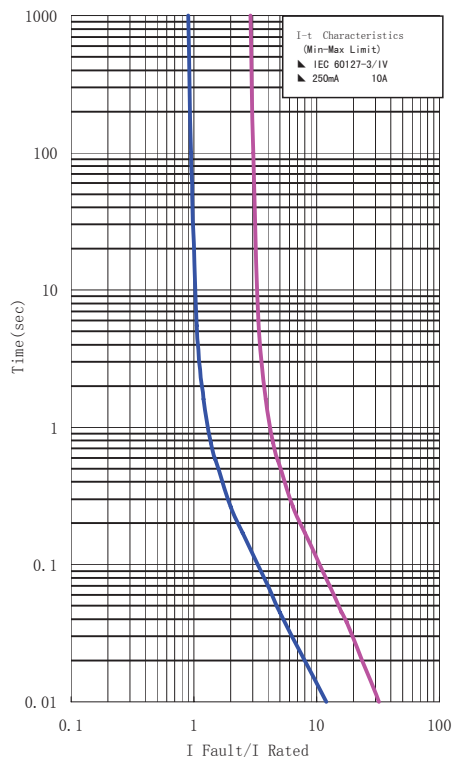
350 °C, ≤1 sec. (Hand)

#### Soldering Heat Resistance(焊温承载能力)

260 °C, 10 sec. (IEC 60068-20)

#### Packaging Code

bulk 1000pcs



#### Electrical Characteristics: IEC-60127-3/IV

| Rated Current | 150% | 210%  | 275%      | 400%     | 1000%      |
|---------------|------|-------|-----------|----------|------------|
| 250mA~10A     | >1h  | <2min | 400ms~10s | 150ms~3s | 20ms~150ms |



Permissible continuous operating current is ≤ 100% at ambient temperature of 23 °C (73.4 °F).

| Rated Current | Amp Code | Voltage Rating | Voltage Drop (mv) MAX | Nominal Melting $I^2T$ (A <sup>2</sup> Sec.) | Breaking Capacity  | Approvals         |
|---------------|----------|----------------|-----------------------|----------------------------------------------|--------------------|-------------------|
|               |          |                |                       |                                              |                    | PSE CQC cURus TUV |
| 250mA         | 0250     | 125V/250V      | 240                   | 0.221                                        |                    | ○ ○ ● ○           |
| 300mA         | 0300     | 125V/250V      | 230                   | 0.292                                        |                    | ○ ○ ○ ○           |
| 315mA         | 0315     | 125V/250V      | 220                   | 0.336                                        |                    | ○ ○ ○ ○           |
| 350mA         | 0350     | 125V/250V      | 210                   | 0.397                                        |                    | ○ ○ ○ ○           |
| 375mA         | 0375     | 125V/250V      | 210                   | 0.456                                        |                    | ○ ○ ○ ○           |
| 400mA         | 0400     | 125V/250V      | 200                   | 0.722                                        |                    | ○ ○ ○ ● ○         |
| 500mA         | 0500     | 125V/250V      | 190                   | 1.00                                         | 50A/125VAC         | ○ ● ● ● ●         |
| 630mA         | 0630     | 125V/250V      | 180                   | 1.35                                         |                    | ○ ● ● ● ●         |
| 750mA         | 0750     | 125V/250V      | 170                   | 1.82                                         | 35A OR 10In/250VAC | ○ ○ ○ ○ ○         |
| 800mA         | 0800     | 125V/250V      | 160                   | 1.56                                         | 50-60Hz            | ○ ● ● ● ●         |
| 1.00A         | 1100     | 125V/250V      | 140                   | 6.5                                          | Cosφ=1.0           | ● ● ● ● ●         |
| 1.25A         | 1125     | 125V/250V      | 130                   | 4.62                                         |                    | ● ● ● ● ○         |
| 1.50A         | 1150     | 125V/250V      | 120                   | 10.6                                         |                    | ○ ○ ○ ○ ○         |
| 1.60A         | 1160     | 125V/250V      | 120                   | 10.9                                         |                    | ● ● ● ● ●         |
| 2.00A         | 1200     | 125V/250V      | 100                   | 20.3                                         |                    | ● ● ● ● ●         |
| 2.50A         | 1250     | 125V/250V      | 100                   | 32.5                                         |                    | ● ● ● ● ●         |
| 3.00A         | 1300     | 125V/250V      | 100                   | 59.3                                         |                    | ○ ○ ○ ○ ○         |
| 3.15A         | 1315     | 125V/250V      | 100                   | 74.52                                        |                    | ● ● ● ● ●         |
| 3.50A         | 1350     | 125V/250V      | 100                   | 90.3                                         |                    | ○ ○ ○ ○ ○         |
| 4.00A         | 1400     | 125V/250V      | 100                   | 94.1                                         |                    | ● ● ● ● ●         |
| 5.00A         | 1500     | 125V/250V      | 100                   | 121                                          |                    | ● ● ● ● ●         |
| 6.30A         | 1630     | 125V/250V      | 100                   | 225                                          |                    | ○ ● ● ● ●         |
| 7.00A         | 1700     | 125V/250V      | 100                   | 110                                          |                    | ○ ○ ○ ○ ○         |
| 8.00A         | 1800     | 125V/250V      | 100                   | 121                                          |                    | ○ ○ ● ● ○         |
| 10.00A        | 2100     | 125V/250V      | 100                   | 196                                          | 50A/250V/125VAC    | ○ ○ ○ ● ○         |

## **Contents**

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## 1. SCOPE

1.1 This Specification applies to 332 series Subminiature fuses.

## 2. GENERAL

### 2.1 General Information

- Time-Lag Low breaking capacity
- 3.6mmX10mm physical size
- Glass tube nicked plated brass end cap construction
- Optional axial leads are 0.65mmX30mm . (8A-10A are 0.8mmX30mm)
- Optional sleeve is flexible flouropolymer (U.L. flammability rating VW-1).
- Designed to IEC60127-3/IV (250mA – 10A)
- RoHS compliant and HF

### 2.2 General Description

332 Time-Lag Low breaking capacity fuse protection for the PC board is used in a variety of applications. This 3.6X10mm device is constructed of glass with electroplated brass end caps. The 332 with a 250V AC rating and 35A Ampere breaking capacity (with 10In) offers excellent assurance with its 100% cold Resistance, and length testing.

## 3. MANUFACTURER

Dongguan Better Electronics Technology co.,ltd.  
NanMen Village, HengKen Administrative Zone  
Liao Bu Town, Dongguan, Guangdong. China.

## 4. Agency Approvals

| Agency | Agency File Number |
|--------|--------------------|
|--------|--------------------|



J50158950



CQC07012019319



E300003



PSE 11020292

## 5. CATALOG SYMBOL AND PART NUMBERING SYSTEM

### 5.1 Catalog Symbol

#### 5.1.1 Example -3321500200

|    |                     |            |             |          |           |
|----|---------------------|------------|-------------|----------|-----------|
|    |                     | <u>332</u> | <u>1500</u> | <u>2</u> | <u>00</u> |
|    |                     | ↓          | ↓           | ↓        | ↓         |
|    |                     | 1          | 2           | 3        | 4         |
| 1) | Series:             |            |             | 332      |           |
| 2) | Ampere Code/Rating: |            |             | 5A       |           |
| 3) | Voltage Rating:     |            |             | 2        | 250V      |
|    |                     |            |             | 1        | 125V      |
| 4) | Package Code:       |            |             | 00       |           |
|    |                     |            |             | 02       |           |
|    |                     |            |             | 03       |           |

### 5.2 Part Numbering System

#### 5.2.1 Packaging Code

| Catalog | Designation                    |
|---------|--------------------------------|
| 00      | Axial leads 30mm-bulk(1000PCS) |
| 02      | Axial leads 45mm-bulk(1000PCS) |
| 03      | Without leads-bulk(2000PCS)    |

#### 5.2.2 Ampere Rating

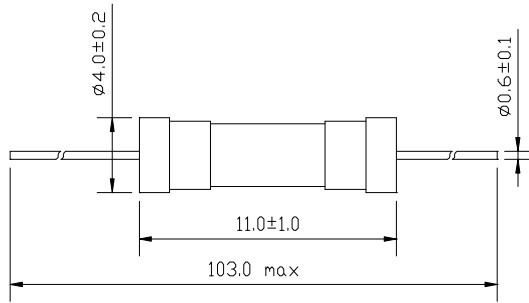
| Amp code | Current Rating | Voltage Rating |
|----------|----------------|----------------|
| 0250     | 250mA          | 250V           |
| 0300     | 300mA          | 250V           |
| 0315     | 315mA          | 250V           |
| 0350     | 350mA          | 250V           |
| 0375     | 375mA          | 250V           |
| 0400     | 400mA          | 250V           |
| 0500     | 500mA          | 250V           |
| 0630     | 630mA          | 250V           |
| 0750     | 750mA          | 250V           |
| 0800     | 800mA          | 250V           |
| 1100     | 1.00A          | 250V           |
| 1125     | 1.25A          | 250V           |
| 1150     | 1.50A          | 250V           |
| 1160     | 1.60A          | 250V           |
| 1200     | 2.00A          | 250V           |
| 1250     | 2.50A          | 250V           |
| 1300     | 3.00A          | 250V           |
| 1315     | 3.15A          | 250V           |
| 1350     | 3.50A          | 250V           |
| 1400     | 4.00A          | 250V           |
| 1500     | 5.00A          | 250V           |
| 1630     | 6.30A          | 250V           |

|      |        |      |
|------|--------|------|
| 1700 | 7.00A  | 250V |
| 1800 | 8.00A  | 250V |
| 2100 | 10.00A | 250V |

## 6. MECHANICAL SPECIFICATIONS

Dimensions (Drawings not to scale)

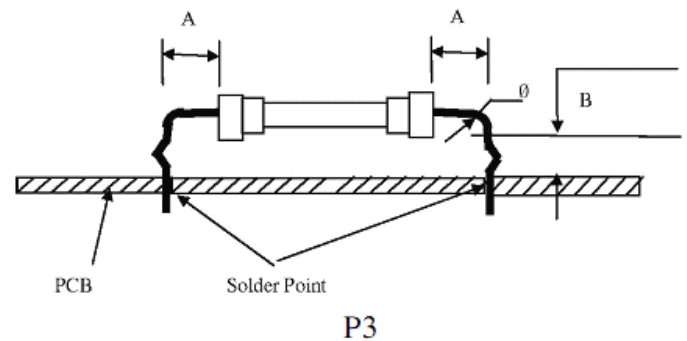
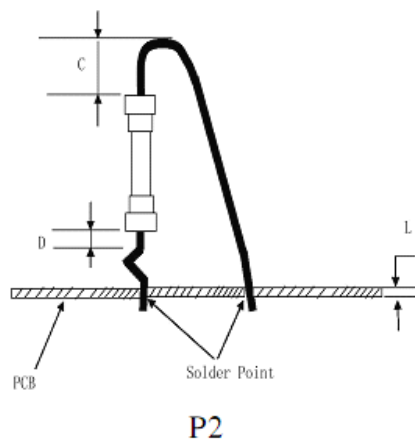
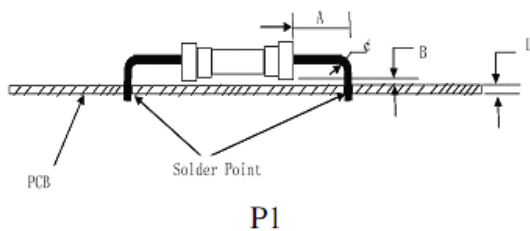
### 6.1.1 Top View mm



## 7. Installation and Soldering For Products

### 7.1 Forming and Installation .

The part can be formed as below shapes to install on the PCB ,but the dimensions must meet below requirements ,and the lead cannot be bent more than 3 times.



## 7.2Lead Tensile and Bending

Lead Tensile: Meet IEC60127-2 ,

The lead can be pulled with a force of 10+/-1N in the direction of axis in a period of 10+/-1Sec.

Lead bending :

IEC60127-2 The lead can be bended two times with a force (Dia. Of Lead from 0.5mm to 0.8mm ,Force is 5+/-1N ;Dia. Of Lead from 0.8mm to 1.25mm ,Force is 10+/-1N ).

## 7.3Soldering Methods

Wave Solder--260°C,10sec.

Reflow Solder—Not Recommended.

## 8. Operating Temperature

-55°C to +125°C (consider de-rating)

## 9. ELECTRICAL SPECIFICATIONS

### 9.1 Time vs. Current Characteristic (Measured with a constant current power supply)

IEC-60127-3/ IV

| Rated Current | 150% | 210%  | 275%      | 400%     | 1000%      |
|---------------|------|-------|-----------|----------|------------|
| 250mA~10A     | >1H  | <2min | 400ms~10S | 150ms~3S | 20ms~150ms |

### 9.2Electrical characteristics

| Rated Current | Amp Code | Voltage Rating | Voltage (mv)MAX | Breaking Capacity                     | Approvals |     |       |     |
|---------------|----------|----------------|-----------------|---------------------------------------|-----------|-----|-------|-----|
|               |          |                |                 |                                       | PSE       | CQC | cURus | TUV |
| 250mA         | 0250     | 250V           | 240             | 35A/250VAC<br>50-60Hz<br><br>Cosφ=1.0 | ○         | ○   | ●     | ○   |
| 300mA         | 0300     | 250V           | 230             |                                       | ○         | ○   | ●     | ○   |
| 315mA         | 0315     | 250V           | 220             |                                       | ○         | ○   | ●     | ○   |
| 350mA         | 0350     | 250V           | 210             |                                       | ○         | ○   | ●     | ○   |
| 375mA         | 0375     | 250V           | 210             |                                       | ○         | ○   | ●     | ○   |
| 400mA         | 0400     | 250V           | 200             |                                       | ○         | ○   | ●     | ○   |
| 500mA         | 0500     | 250V           | 190             |                                       | ○         | ●   | ●     | ●   |
| 630mA         | 0630     | 250V           | 180             |                                       | ○         | ●   | ●     | ●   |
| 750mA         | 0750     | 250V           | 170             |                                       | ○         | ○   | ●     | ○   |
| 800mA         | 0800     | 250V           | 160             |                                       | ○         | ●   | ●     | ●   |
| 1.00A         | 1100     | 250V           | 140             |                                       | ●         | ●   | ●     | ●   |
| 1.25A         | 1125     | 250V           | 130             |                                       | ●         | ●   | ●     | ●   |
| 1.50A         | 1150     | 250V           | 120             |                                       | ○         | ○   | ●     | ○   |
| 1.60A         | 1160     | 250V           | 120             |                                       | ●         | ●   | ●     | ●   |
| 2.00A         | 1200     | 250V           | 100             |                                       | ●         | ●   | ●     | ●   |
| 2.50A         | 1250     | 250V           | 100             |                                       | ●         | ●   | ●     | ●   |
| 3.00A         | 1300     | 250V           | 100             |                                       | ○         | ○   | ●     | ○   |
| 3.15A         | 1315     | 250V           | 100             |                                       | ●         | ●   | ●     | ●   |
| 3.50A         | 1350     | 250V           | 100             |                                       | ○         | ○   | ●     | ○   |
| 4.00A         | 1400     | 250V           | 100             | 40A/250VAC/cosφ=1.0                   | ●         | ●   | ●     | ●   |
| 5.00A         | 1500     | 250V           | 100             | 50A/250VAC/cosφ=1.0                   | ●         | ●   | ●     | ●   |
| 6.30A         | 1630     | 250V           | 100             | 63A/250VAC/cosφ=1.0                   | ○         | ●   | ●     | ●   |
| 7.00A         | 1700     | 250V           | 100             | 70A/250VAC/cosφ=1.0                   | ○         | ○   | ●     | ○   |
| 8.00A         | 1800     | 250V           | 100             | 80A/250VAC/cosφ=1.0                   | ○         | ○   | ●     | ○   |
| 10.00A        | 2100     | 250V           | 100             | 100A/250VAC/cosφ=1.0                  | ○         | ○   | ●     | ○   |

**Note:**

- AC interrupting rating (Measured at rated voltage with a unity power factor)
- Typical Voltage Drop (Measured at rated current after temperature stabilizes)

**9.3 AGENCY CERTIFICATION AND APPROVAL INFORMATION**

| Rating | 1st. Cap marking          | 2nd. Cap marking                  |
|--------|---------------------------|-----------------------------------|
| 250mA  | <b>(b)</b> T 250mA L 250V | 332 cUR <sub>US</sub>             |
| 300mA  | <b>(b)</b> T 300mA L 250V | 332 cUR <sub>US</sub>             |
| 315mA  | <b>(b)</b> T 315mA L 250V | 332 cUR <sub>US</sub>             |
| 350mA  | <b>(b)</b> T 350mA L 250V | 332 cUR <sub>US</sub>             |
| 375mA  | <b>(b)</b> T 375mA L 250V | 332 cUR <sub>US</sub>             |
| 400mA  | <b>(b)</b> T 400mA L 250V | 332 cUR <sub>US</sub>             |
| 500mA  | <b>(b)</b> T 500mA L 250V | 332 cUR <sub>US</sub> CQC TUV     |
| 630mA  | <b>(b)</b> T 630mA L 250V | 332 cUR <sub>US</sub> CQC TUV     |
| 750mA  | <b>(b)</b> T 750mA L 250V | 332 cUR <sub>US</sub>             |
| 800mA  | <b>(b)</b> T 800mA L 250V | 332 cUR <sub>US</sub> CQC TUV     |
| 1.00A  | <b>(b)</b> T 1A L 250V    | 332 cUR <sub>US</sub> CQC TUV PSE |
| 1.25A  | <b>(b)</b> T 1.25A L 250V | 332 cUR <sub>US</sub> CQC TUV PSE |
| 1.50A  | <b>(b)</b> T 1.5A L 250V  | 332 cUR <sub>US</sub>             |
| 1.60A  | <b>(b)</b> T 1.6A L 250V  | 332 cUR <sub>US</sub> CQC TUV PSE |
| 2.00A  | <b>(b)</b> T 2A L 250V    | 332 cUR <sub>US</sub> CQC TUV PSE |
| 2.50A  | <b>(b)</b> T 2.5A L 250V  | 332 cUR <sub>US</sub> CQC TUV PSE |
| 3.00A  | <b>(b)</b> T 3A L 250V    | 332 cUR <sub>US</sub>             |
| 3.15A  | <b>(b)</b> T 3.15A L 250V | 332 cUR <sub>US</sub> CQC TUV PSE |
| 3.50A  | <b>(b)</b> T 3.5A L 250V  | 332 cUR <sub>US</sub>             |
| 4.00A  | <b>(b)</b> T 4A L 250V    | 332 cUR <sub>US</sub> CQC TUV PSE |
| 5.00A  | <b>(b)</b> T 5A L 250V    | 332 cUR <sub>US</sub> CQC TUV PSE |
| 6.30A  | <b>(b)</b> T 6.3A L 250V  | 332 cUR <sub>US</sub> CQC TUV     |
| 7.00A  | <b>(b)</b> T 7A L 250V    | 332 cUR <sub>US</sub>             |
| 8.00A  | <b>(b)</b> T 8A L 250V    | 332 cUR <sub>US</sub>             |

10.00A

**(b)** T 10A L 250V

332 cUR<sub>US</sub>

\*Notion :The certification symbols and mark is based on actual goods。

## 10.TEMPERATURE DERATING CURVE

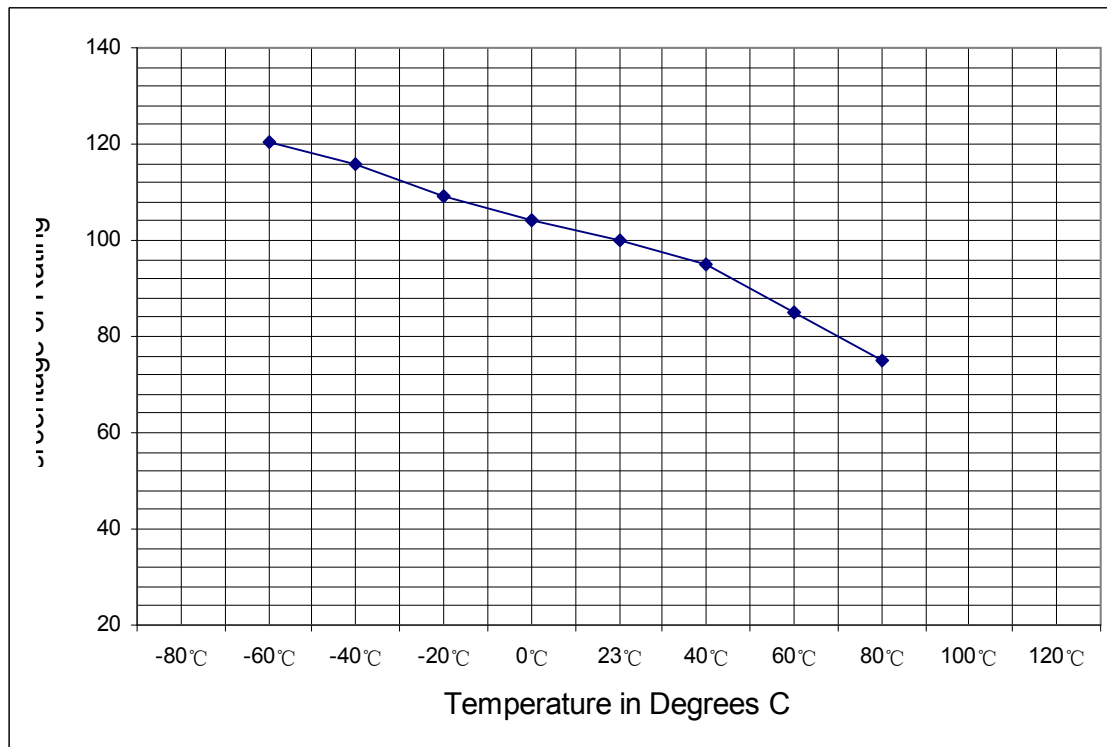


Chart of correction factor  
ENVIRONMENTAL (RELIABILITY/QUALIFICATION) DATA

**11.End**