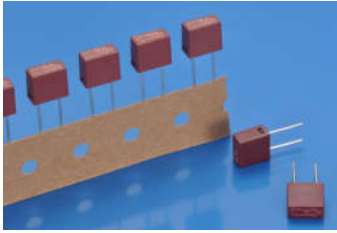




## 1. SCOPE AND DESCRIPTION



Following electronic product specifications apply to fuses of the 932 series. The 932 series is a sub-miniature fuse links for over-current protection.

Its main applications are for consumer electronics, LED drivers, power supplies, battery chargers and controllers for industrial use.

## 2. GENERAL INFORMATION










### General Description

The 932 series provides protection for printed circuit boards used in a large variety of applications that need fuses with time-delay, low breaking capacity. The sub-miniature device is constructed of a plastic cap and base with a tin plated copper lead wire. It offers excellent mounting characteristics and is 100% tested for cold resistance.

### Detailed Features

- Subminiature fuse with time-lag, low breaking capacity
- Small, rectangular and leaded design minimizes board space and eliminates the need for additional mounting components
- Plastic cap / brown thermoplastic fuse body.
- 0.6mm lead wires made of tin plated copper.
- Protection against harmful over-currents in primary and secondary applications.
- Lead-free, Halogen-free, RoHS compliant
- Designed according to IEC 60127

**3. AGENCY APPROVALS**

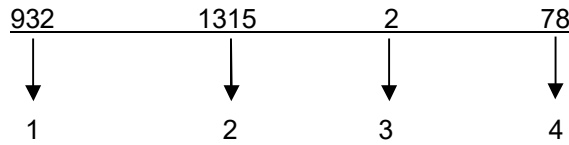
Agency	Agency File Number	Voltage / Current Rating
	E300003	125V / 250V / 277V / 300V/ 400V:100mA~16A
	40033369	250V AC:630mA;800mA;1A;1.25A;1.6A;2A;2.5A;3.15A;4A;5A;6.3A
	CQC20012242947 CQC20012260656	300V AC: 500mA;1A;1.25A;1.6A;2A;2.5A;3.15A;4A;5A;6.3A;8A;10A 250V AC :12.5A;16A
	2020970207000039	250V AC:125mA;160mA;200mA;250mA;315mA;400mA; 500mA;630mA;800mA;1A;1.25A;1.6A;2A;2.5A;3.15A;4A;5A;6.3A;8A;10A
	PSE15020937 PSE19021462	250V AC:1A;1.25A;1.6A;2A;2.5A;3.15A;4A;5A 250V AC:6.3A
	SU05042-13003 SU05042-13002 SU05042-13001	250VAC:500mA;630mA;800mA;1A;1.25A;1.6A;2A;2.5A; 3.15A ;4A;5A;6.3A
	R 50279350 R 50450787	250V/300V AC: 125mA;160mA;200mA;250mA;315mA; 400mA;500mA; 630mA; 800mA;1A;1.25A;1.6A;2A;2.5A;3.15A;4A;5A;6.3A;8A;10A 250V AC: 12.5A;16A;20A
	KM 677189	250VAC:3.15A;5A;8A;10A
	1719061	250VAC:3.15A;5A;8A;10A



## 4. PART NUMBERING SYSTEM

### 4.1 Part Number

Example: 9321315278



- |                             |  |
|-----------------------------|--|
| 1 .Product Series .....     | 932                                      |
| 2 .Ampere Rating .....      | 3.15A (see table 4.2 below)              |
| 3 .Rated Voltage .....      | 1- 125V<br>2- 250V<br>3- 300V<br>K- 400V |
| 4 .Supplementary Code ..... | See table 4.3 below                      |

### 4.2. Ampere / Voltage Rating Table

AMP COGE	CURRENT RATING	VOLTAGE RATING
0125	125mA	125V / 250V / 277V / 300V / 400VAC
0160	160mA	125V / 250V / 277V / 300V / 400VAC
0200	200mA	125V / 250V / 277V / 300V / 400VAC
0250	250mA	125V / 250V / 277V / 300V / 400VAC
0315	315mA	125V / 250V / 277V / 300V / 400VAC
0400	400mA	125V / 250V / 277V / 300V / 400VAC
0500	500mA	125V / 250V / 277V / 300V / 400VAC
0630	630mA	125V / 250V / 277V / 300V / 400VAC
0800	800mA	125V / 250V / 277V / 300V / 400VAC
1100	1.00A	125V / 250V / 277V / 300V / 400VAC
1125	1.25A	125V / 250V / 277V / 300V / 400VAC
1160	1.60A	125V / 250V / 277V / 300V / 400VAC
1200	2.00A	125V / 250V / 277V / 300V / 400VAC
1250	2.50A	125V / 250V / 277V / 300V / 400VAC
1315	3.15A	125V / 250V / 277V / 300V / 400VAC
1400	4.00A	125V / 250V / 277V / 300V / 400VAC
1500	5.00A	125V / 250V / 277V / 300V / 400VAC
1630	6.30A	125V / 250V / 277V / 300V / 400VAC
1800	8.00A	125V / 250V / 277V / 300V / 400VAC
2100	10.00A	125V / 250V / 277V / 300V / 400VAC
2120	12.00A	125V / 250V / 277V / 300V / 400VAC
2125	12.50A	125V / 250V / 277V / 300V / 400VAC
2150	15.00A	125V / 250V / 277V / 300V / 400VAC
2160	16.00A	125V / 250V / 277V / 300V / 400VAC

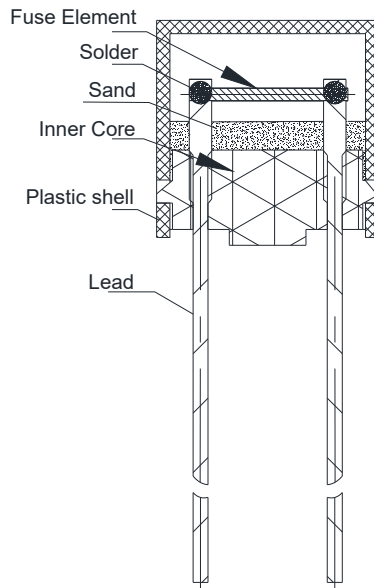
### 4.3. Supplementary Code Table

CODE	DESIGNATION
00	Special products
01	Taping
02	bulk
03	Lead wire:4.3±0.3
05	Lead wire:3.5±0.5
06	Lead wire:4±0.5
.	.
.	.
.	.
78	Taping

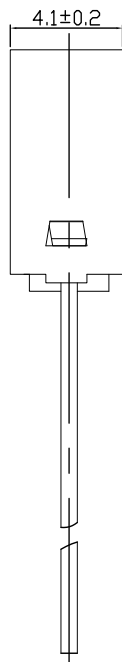
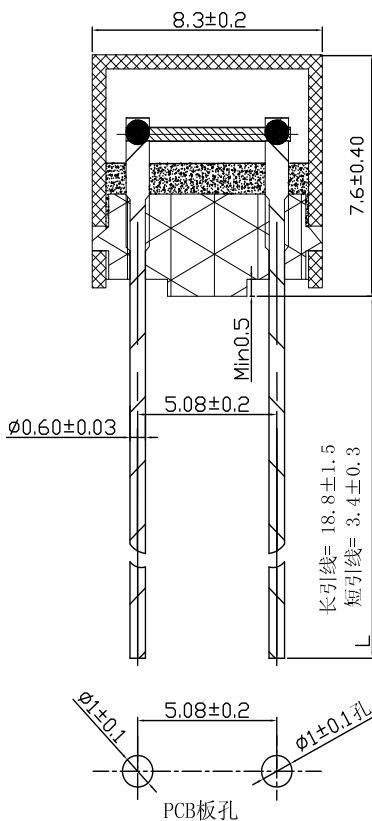


5. CONSTRUCTION AND MECHANICAL CHARACTERISTICS

Construction (cross section)



Dimensions (unit: mm)



Operating Temperature:

-55°C to +125°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

Long Leads: L=18.8±1.5mm

Short Leads: L=3.4±0.3mm

The dimension of 5.08 ± 0.2mm is the distance between PIN center holes



**6. ELECTRICAL SPECIFICATIONS**

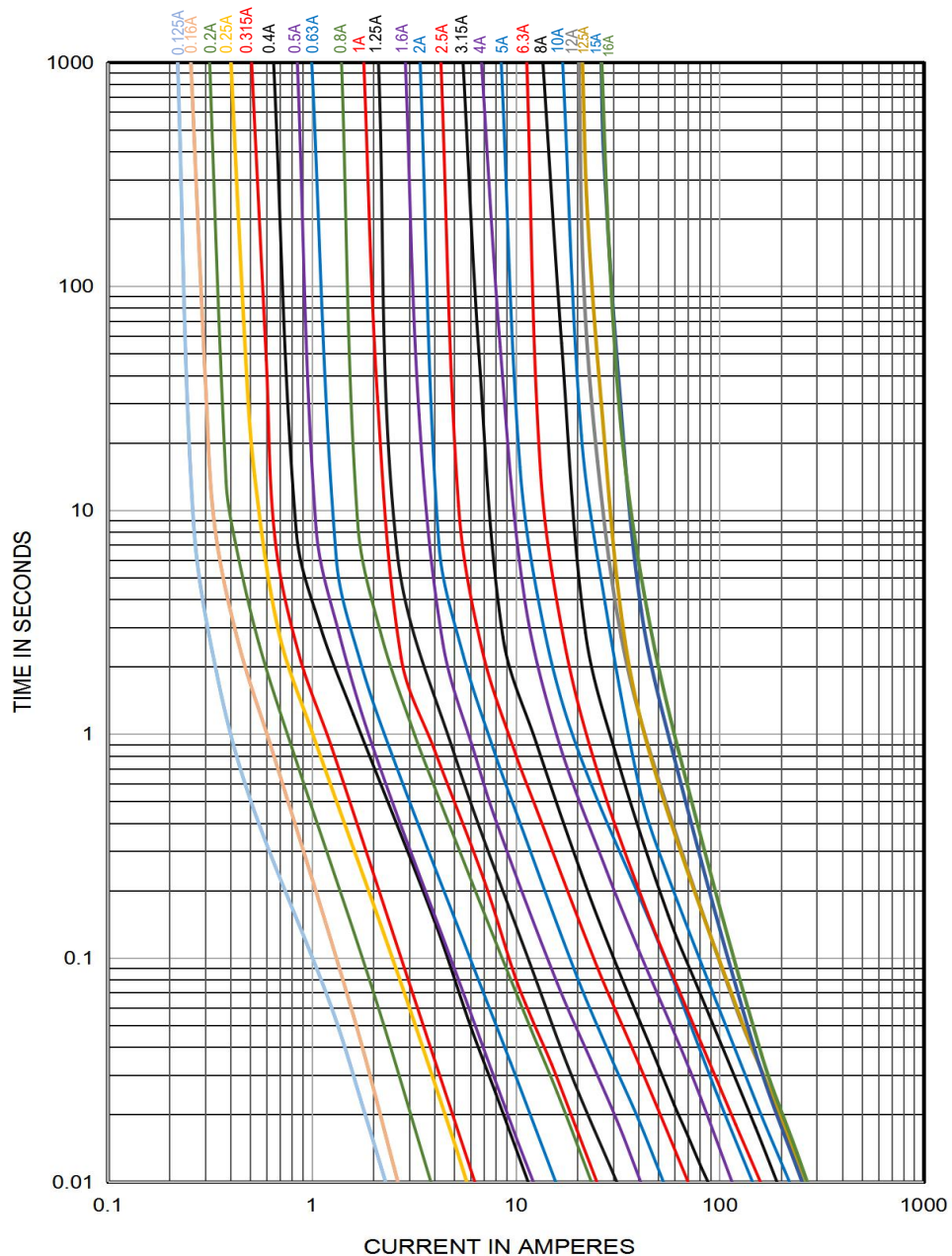
**Time vs Current Characteristics Table**

(measured with constant current power supply)

Time vs Current Characteristics:IEC60127					
Rated Current	150%	210%	275%	400%	1000%
100mA~6.3A	>1h	<2min	400ms~10s	150ms~3s	20ms~150ms
8A~10A	>1h	<300s	1s~20s	150ms~3s	20ms~150ms
12A~16A	>1h	<300s	1s~50s	150ms~5s	20ms~150ms

**Average Time Current (I-T Curves)**

Average Current Curve(I-T Curve)

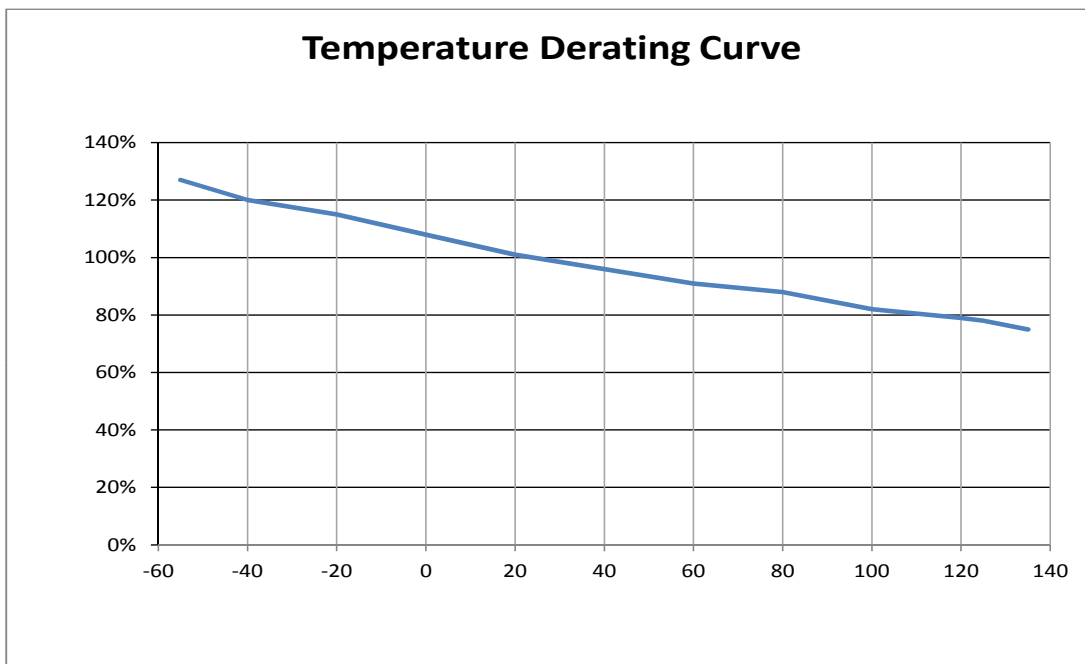




Electrical Characteristics at 25°C																	
Amp Code	Rated Current	Rated Voltage	Voltage Drop Max(mV)	Max Power Dissipation (mW)	Typical Cold Resistance (mΩ)	Nominal Melting I <sup>2</sup> T (A <sup>2</sup> sec)	Breaking Capacity	Approvals									
								cURus	VDE	CCC	CQC	PSE	KC	TUV 250V	TUV 300V	BSI	SEMKO
0125	125mA	125V AC 250VAC 300VAC 400V AC	300	180	1500	0.053	100A@125V AC 100A@250V AC 50A or10In 300V AC 160A@125V/250V AC 100A@277V/300V/400V AC	•	○	•	○	○	○	•	•	○	○
0160	160mA		280	190	1290	0.073		•	○	•	○	○	○	•	•	○	○
0200	200mA		260	200	796	0.170		•	○	•	○	○	○	•	•	○	○
0250	250mA		240	220	540	0.320		•	○	•	○	○	○	•	•	○	○
0315	315mA		220	250	380	0.450		•	○	•	○	○	○	•	•	○	○
0400	400mA		200	280	245	1.32		•	○	•	○	○	○	•	•	○	○
0500	500mA		190	310	185	1.76		•	○	•	•	○	•	•	•	○	○
0630	630mA		180	360	130	3.40		•	•	•	○	○	•	•	•	○	○
0800	800mA		160	430	120	3.60		•	•	•	○	○	•	•	•	○	○
1100	1.00A		140	500	95	6.80		•	•	•	•	•	•	•	•	○	○
1125	1.25A		130	600	69.8	14.5		•	•	•	•	•	•	•	•	○	○
1160	1.60A		120	730	46.5	22.0		•	•	•	•	•	•	•	•	○	○
1200	2.00A		100	870	34.8	37.0		•	•	•	•	•	•	•	•	○	○
1250	2.50A		100	1000	26.3	56.2		•	•	•	•	•	•	•	•	○	○
1315	3.15A		100	1200	22.0	108		•	•	•	•	•	•	•	•	•	•
1400	4.00A		100	1400	14.6	156		•	•	•	•	•	•	•	•	○	○
1500	5.00A		100	1400	11.5	275		•	•	•	•	•	•	•	•	•	•
1630	6.30A		100	1400	8.80	272		•	•	•	•	•	•	•	•	○	○
1800	8.00A		100	1400	6.00	410		•	○	•	•	○	○	•	•	•	•
2100	10.00A		100	1400	4.60	486		•	○	•	•	○	○	•	•	•	•
2120	12.00A		180	4000	3.50	646		•	○	○	○	○	○	○	○	○	○
2125	12.50A	180	4000	3.60	880	•	○	○	•	○	○	•	○	○	○		
2150	15.00A	140	4000	2.70	635	•	○	○	○	○	○	○	○	○	○		
2160	16.00A	140	4000	2.60	706	•	○	○	•	○	○	•	○	○	○		

- Notes:**
1. Permissible continuous operating current is ≤100% at ambient temperature of 23°C (73.4°F)
  2. For certification, the cURus by 125/250/277V/300V/400V, the TUV by 250/300V; the CQC 500mA~10A by 300V, 12.5A; 16A by 250V, the others by 250V.
  3. The current values used for calculating I<sup>2</sup>T should be within the standard range of 8ms ~ 10ms.

### Temperature Derating Curve



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



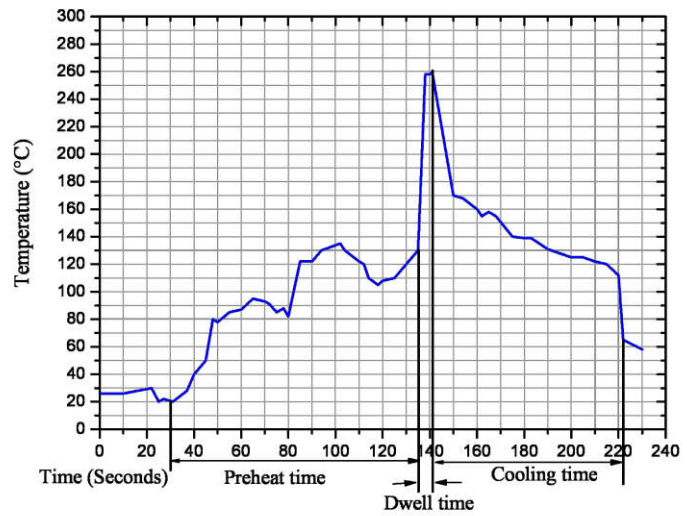
### 7.SOLDERING PARAMETERS

260±5°C.≤5 sec (Wave Soldering)

350°C.≤3 sec (Hand Soldering)

Soldering Peak:

260±5°C - 10 sec (IEC 60068-20)



### 8.ORDERING INFORMATION

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

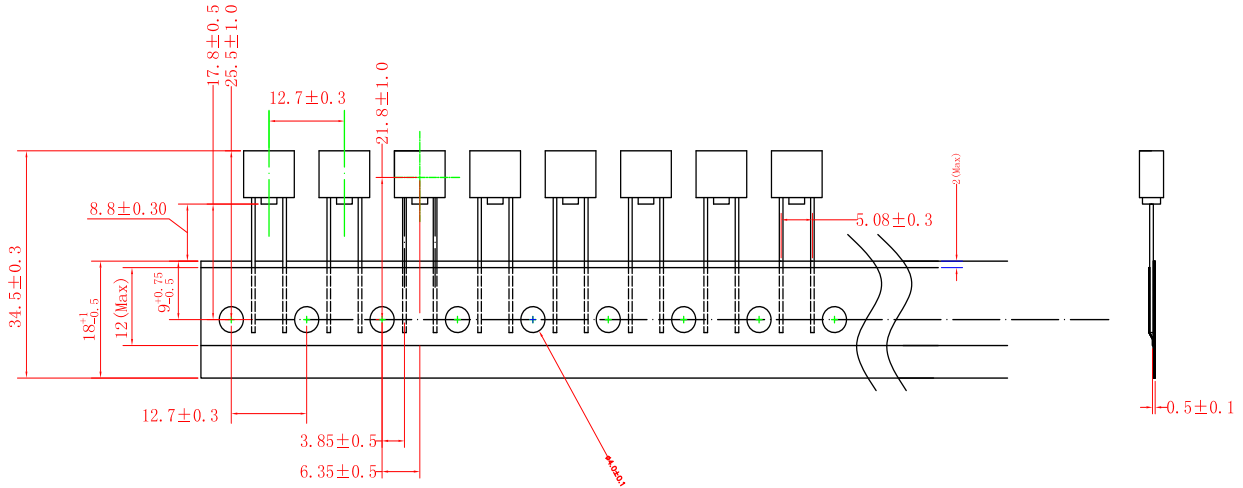
Series	Amp Code	Supplementary Code	Qty
932			



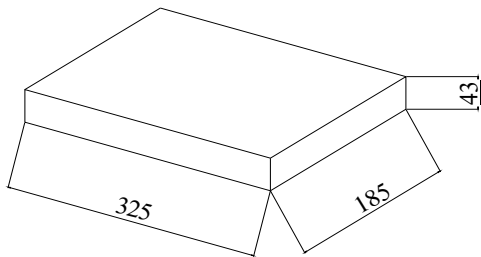
9.PACKING INFORMATION

Taping detail

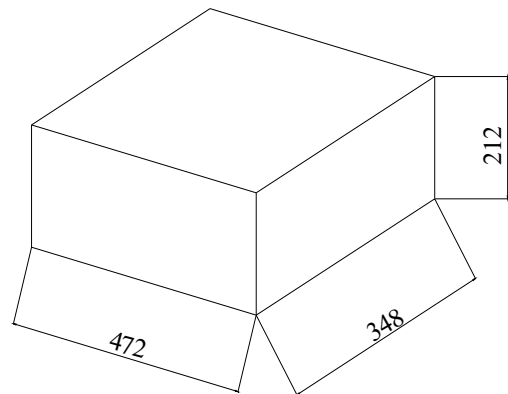
Unit:mm



Inner Packaging Box



Master Carton



Net Weight (1000pcs+Taping)	0.54Kg	Master Carton Weight	6.10Kg
Qty Per Box	1000pcs	Qty Per Carton	10000pcs