

**Better**Circuit protection component
manufacturer & brand operator**3*7mm / NO. 211****Quick-Acting Coating microfuse with Pig-Tail Series**

超小型快速熔断涂树脂保险管(带引线)

Time-Current Characteristic(时间—电流特性)

Quick-Acting (F)

Standard(标准)

UL-248-14

Materials(物料)

Tube: Ceramic 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 30 days-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)

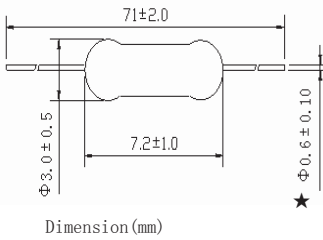
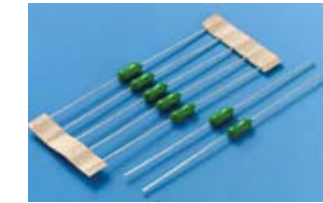
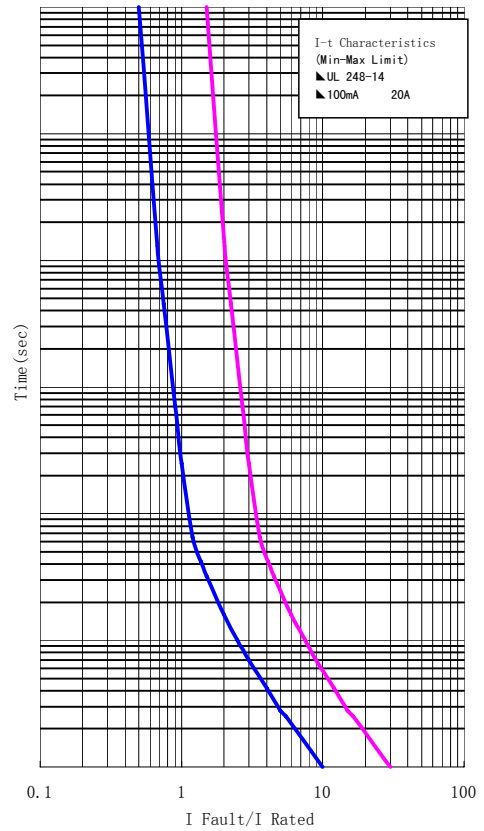
350 °C, ≤ 1 sec. (Hand)

Soldering Heat Resistance(焊温承载能力)

260 °C, 10 sec.

Packaging Code

bulk 4000pcs



★:
100mA~6.3A : Φ0.60mm
8.0A~20.0A : Φ0.80mm

Electrical Characteristics: UL-248-14

Rated Current	100%	200%
100mA~20A	>4h	<60s

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

Rated Current	Amp Code	Voltage Rating	Nominal Melting I^2T (A ² Sec.)	Breaking Capacity	Approvals
					cULus cURus TUV
100mA	0100	250V/125V	0.0191	50A 250V AC 50A 125V AC	● ○ ○
125mA	0125	250V/125V	0.0298		● ○ ○
160mA	0160	250V/125V	0.0489		● ○ ○
200mA	0200	250V/125V	0.081		● ○ ○
250mA	0250	250V/125V	0.1265		● ○ ●
315mA	0315	250V/125V	0.2304		● ○ ●
400mA	0400	250V/125V	0.360		● ○ ●
500mA	0500	250V/125V	0.1089		● ○ ●
630mA	0630	250V/125V	0.1267		● ○ ●
800mA	0800	250V/125V	0.301		● ○ ●
1A	1100	250V/125V	0.49	35A 250V AC 35A 125V AC	● ○ ●
1.25A	1125	250V/125V	0.846		● ○ ●
1.6A	1160	250V/125V	1.392		● ○ ●
2A	1200	250V/125V	3.61		● ○ ●
2.5A	1250	250V/125V	6.76		● ○ ●
3.15A	1315	250V/125V	7.99		○ ● ●
4A	1400	250V/125V	4.00		○ ● ●
5A	1500	250V/125V	9.3		○ ● ○
6.3A	1630	250V/125V	12.96		○ ● ○
8A	1800	250V/125V	29.16		○ ● ○
10A	2100	250V/125V	42.25	50A 32V AC 100A 16V AC	○ ● ○
12A	2120	16V/32V	78.32		○ ● ○
15A	2150	16V/32V	249.6		○ ● ○
16A	2160	16V/32V	255		○ ● ○
20A	2200	16V/32V	392		○ ● ○



National High-Tech Enterprise
SC 32C National Technical
Committee Member of China
851 ISO 9001 certified company
MOODY ISO 14001 certified company

国家高新技术企业
SC 32C 国家技术委员会成员单位
851 ISO 9001 认证企业
MOODY ISO 14001 认证企业

BETTER ELECTRONICS TECHNOLOGY CO., LTD.
东莞市贝特电子科技股份有限公司
www.betterfuse.com

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1. SCOPE

1.1 This Specification applies to 211 Series Sub-Miniature fuses.

2. GENERAL

2.1 General Information

- Quick-acting Low breaking capacity
- 3.0mmX7.2mm physical size
- Ceramic tube nicked plated brass end cap construction, Encapsulated, Epoxy-Coating body
- Optional axial leads are 0.8mmX30mm
- Designed to UL 248-14
- RoHS compliant and HF

2.2 General Description

211 series Quick-acting Low breaking capacity fuse protection for the PC board is used in a variety of applications. This 2.8x7.2mm device is constructed of ceramic with electroplated brass end caps. The 211 series with 16 VDC rating and 100A Ampere breaking capacity 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 NO.	Ampere Range
	E300003	100mA -2.5A
	E300003	3.15A -20A
TUV	50242119	250mA-4A

5. CATALOG SYMBOL AND PART NUMBERING SYSTEM

5.1 Catalog Symbol

5.1.1 Example -2110375200

	<u>211</u>	<u>0375</u>	<u>2</u>	<u>00</u>
	↓	↓	↓	↓
	1	2	3	4
1)	Series:			211
2)	Ampere Code/Rating:			0.375 A
3)	Voltage Rating:			1 120 V
				2 250 V
4)	Package Code:			00
				01

5.2 Part Numbering System

5.2.1 Packaging

Taping Package	4000pcs/box	40000pcs/case

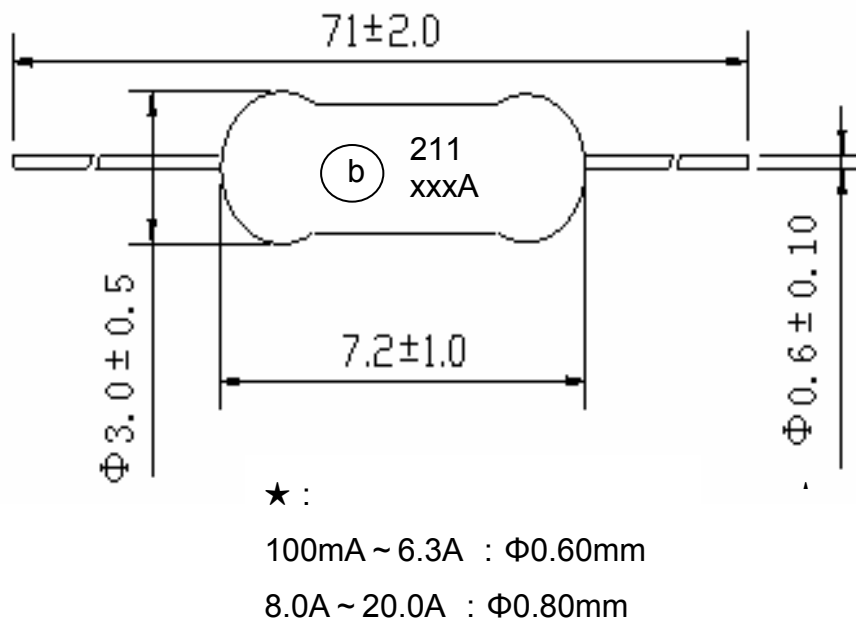
5.2.2 Ampere Rating

Amp Code	Rated Current	Voltage Rating
0100	100mA	250V/125V
0125	125mA	250V/125V
0160	160mA	250V/125V
0200	200mA	250V/125V
0250	250mA	250V/125V
0315	315mA	250V/125V
0375	375mA	250V/125V
0400	400mA	250V/125V
0500	500mA	250V/125V
0630	630mA	250V/125V
0800	800mA	250V/125V
1100	1.00A	250V/125V
1125	1.25A	250V/125V
1160	1.60A	250V/125V
1200	2.00A	250V/125V
1250	2.50A	250V/125V
1315	3.15A	250V/125V
1400	4.00A	250V/125V
1500	5.00A	250V/125V
1630	6.30A	250V/125V
1800	8.00A	250V/125V
2100	10.00A	250V/125V
2120	12.00A	16V/32V
2150	15.00A	16V/32V
2160	16.00 A	16V/32V
2200	20.00 A	16V/32V

6. MECHANICAL SPECIFICATIONS

Dimensions (Drawings not to scale)

6.1.1 Top View mm



7. Soldering For Products

7.1Lead Tensile and Bending

Lead Tensile: Meet UL-248 -14

The lead can be pulled with a force of 5+/-1N in the direction of axis in a period of 10+/-1Sec.

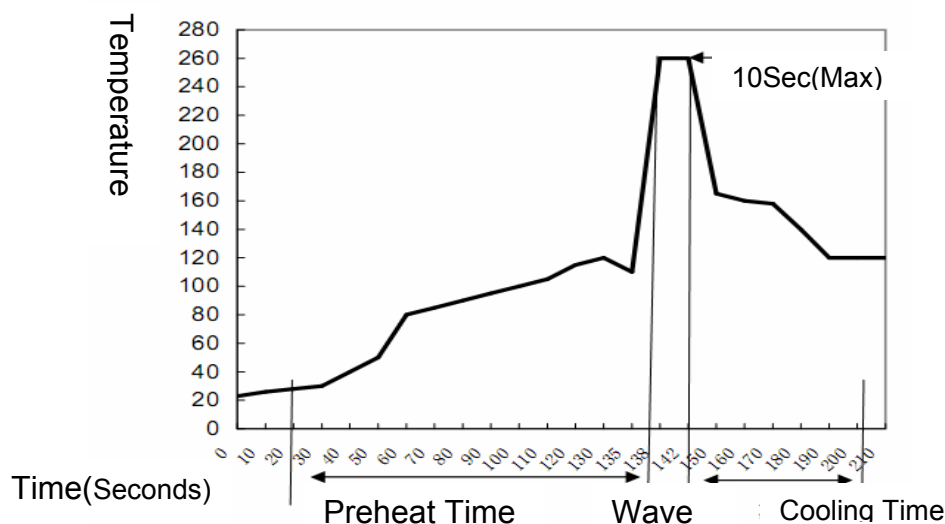
7.2Soldering Methods

Wave Solder--260°C, ≤3Sec.

Hand Solder—350°C, ≤1Sec.

Reflow Solder—Not Recommended.

7.3Soldering Parameters-Wave Soldering



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)

UL248-14

Rated Current	100%	200%
100mA-20A	>4h	<60s

9.2 Electrical characteristics

Rated Current	Amp Code	Voltage Rating	Nominal Melting I ² T (A ² Sec)	Breaking Capacity	Approvals		
					cULus	cURus	TUV
100 mA	0100	250V/125V	0.0191	50A 250V AC 50A 125V AC	●	○	○
125 mA	0125	250V/125V	0.0298		●	○	○
160 mA	0160	250V/125V	0.0489		●	○	○
200 mA	0200	250V/125V	0.0810		●	○	○
250 mA	0250	250V/125V	0.1265		●	○	●
315 mA	0315	250V/125V	0.2304		●	○	●
400 mA	0400	250V/125V	0.3600		●	○	●
500 mA	0500	250V/125V	0.1089		●	○	●
630 mA	0630	250V/125V	0.1267		●	○	●
800 mA	0800	250V/125V	0.3010		●	○	●
1.00 A	1100	250V/125V	0.4900		●	○	●
1.25 A	1125	250V/125V	0.8460		●	○	●
1.60 A	1160	250V/125V	1.3920		●	○	●
2.00 A	1200	250V/125V	3.6100		●	○	●
2.50 A	1250	250V/125V	6.7600		●	○	●
3.15 A	1315	250V/125V	7.9900	35A 250V AC 35A 250V AC	○	●	●
4.00 A	1400	250V/125V	4.0000		○	●	●
5.00 A	1500	250V/125V	9.3000		○	●	○
6.30 A	1630	250V/125V	12.9600		○	●	○
8.00 A	1800	250V/125V	29.1600		○	●	○
10.00 A	2100	250V/125V	42.2500		○	●	○
12.00 A	2120	16V/32V	78.3200	50A 32V AC 100A 16V AC	○	●	○
15.00 A	2150	16V/32V	249.6000		○	●	○
16.00 A	2160	16V/32V	255.0000		○	●	○
20.00 A	2200	16V/32V	392.0000		○	●	○

Note:

- AC interrupting rating (Measured at rated voltage with a unity power factor)
- UR or UL approvals is finished.

10. TEMPERATURE DERATING CURVE

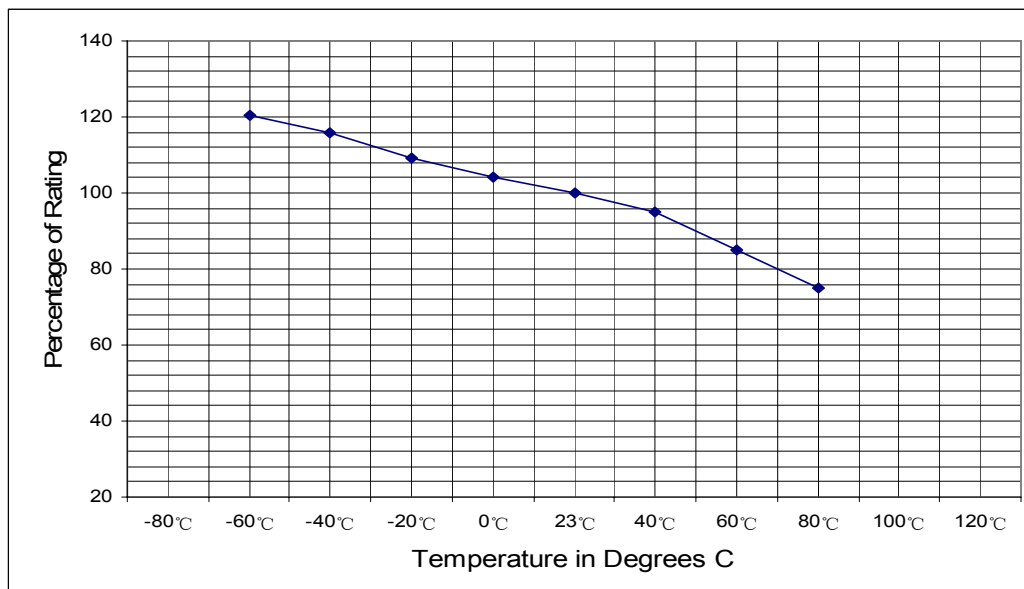


Chart of correction factor ENVIRONMENTAL (RELIABILITY/QUALIFICATION) DATA

11. End

Zertifikat

mit überwachter Konformität

Certificate

of surveyed conformity



Zertifikat Nr. Certificate No.
J 50242119

Blatt Page
0001

Ihr Zeichen Client Reference

Unser Zeichen Our Reference

Ausstellungsdatum

Date of Issue
(day/mo/yr)

05-YFC- 16047191 001

27.11.2012

Genehmigungsinhaber License Holder

Dongguan Better Electronic
Technology Co., Ltd.

Room No. 102, 103 of 3rd block

114 of 4th Block Innovtive Tech. Par

of Songshan Lake High-tech Ind. Park

Dongguan, Guangdong

P.R. China

Fertigungsstätte Manufacturing Plant

Dongguan Better Electronic
Technology Co., Ltd.

Nanmen Village, Hengken

Administrative Zone, Liaobu Town

Dongguan, Guangdong

P.R. China

Prüfzeichen Test Mark

Geprüft nach Tested acc. to

EN 60127-1:2006+A1

EN 60127-3:1996+A2



Zertifiziertes Produkt (Geräteidentifikation)

Certified Product (Product Identification)

Lizenzentgelte - Einheit

License Fee - Unit

(Sub-miniature Fuse-links)

Type Designation : 211
Rated Voltage : AC 250V; 50Hz/60Hz
Rated Current (In) : 250mA; 315mA; 400mA; 500mA; 630mA;
800mA; 1A; 1,25A; 1,6A; 2A; 2,5A;
3,15A; 4A
Time/Current Characteristic: F
Rated Breaking Capacity : AC 35A or 10In(which is higher)

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Remark :

The requirements of standard sheet 3 were taken into consideration.

The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.

The installation has to be carried out according to installation instruction accompanying the products.

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ANLAGE (Appendix) : 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above mentioned requirements, the production is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle



Dipl.-Ing. (FH) T. Zimmer



JDYX2.E300003 Fuses, Supplemental - Component

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Fuses, Supplemental - Component

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DONGGUAN BETTER ELECTRONIC TECHNOLOGY CO LTD
NAMEN VILLAGE
HENGKEN ADMINISTRATIVE ZONE
LIAOBU TOWN
DONGGUAN, GUANGDONG 523413 CHINA

E300003

Cat. No.	Size	Amps	V ac	Interrupting Rating (kA)
522	20 x 5 mm	1-15	125/250	10, 125 V ac, 0.100 A, 250 V ac
	20 x 5 mm	0.1-0.8	125/250	10, 125 V ac, 0.035 A, 250 V ac
611	6.35 x 32 mm	12-20	125/250	10, 125 V ac, 0.200, 250 V ac
332	11 x 3.9 mm	0.25-10.0	125/250	0.050, 125 Vac, 0.050, 250 Vac
521	20 x 5 mm	0.315-10.0	125/250	10, 125 V ac, 0.0100, 250 V ac
334	11 x 3.9 mm	0.25-10.0	125/250	0.050, 125 Vac, 50 A, 250 Vac
524	20 x 5 mm	0.5-16	125/250	10, 125 Vac, 1.5, 250 Vac
	20 x 5 mm	20-25	125/250	0.200, 125 Vac, 0.400, 250 Vac
316	12 x 3.9 mm	0.25-10	350	0.050, 350 Vac
523	20 x 5 mm	0.5-10	125/250	10, 125 Vac, 1.5, 250 Vac
614	31.8 x 6.35 mm	4-20	125/250	10, 125 Vac, 0.200, 250 Vac
	31.8 x 6.35 mm	25-30	125/250	0.400, 125 Vac, 0.100, 250 Vac
331	3.9 x 11.0 mm	0.25-10	125/250	0.050, 125 Vac, 0.050, 250 Vac
511	5 x 20 mm	0.5-0.8	125/250	10, 125 Vac, 0.035, 250 Vac
		1.0-3.15	125/250	10, 125 Vac, 0.100, 250 Vac
		4.0-6.3	125/250	10, 125 Vac, 0.200, 250 Vac
		7.0-15.0	125/250	0.100, 125 Vac, 0.100, 250 Vac
512	5 x 20 mm	0.5-0.8	125/250	10, 125 Vac, 0.035, 250 Vac
		1.0-6.3	125/250	10, 125 Vac, 0.100, 250 Vac
		7.0-15.0	125/250	0.400, 125 Vac, 0.100, 250 Vac
612	6.35 x 31.8 mm	10-20	125/250	0.400, 125 Vac, 0.200, 250 Vac
		25-30	125/250	0.400, 125 Vac, 0.100, 250 Vac
613	6.35 x 31.8 mm	10-20	125/250	0.400, 125 Vac, 0.200, 250 Vac
		25	125/250	0.400, 125 Vac, 0.100, 250 Vac

615	6.35 x 31.8 mm	0.5-10	660	0.300, 660 Vac
			1000	0.100, 1000 Vac
316	3.9 x 12 mm	0.25-10	250 350	0.150, 250 Vac 0.100, 350 Vac
061	1.6 x 0.81 x 0.48 mm	0.25-1 1.25-5	32 dc 32 dc	0.050, 32 Vdc 0.035, 32 Vdc
063	1.6 x 0.81 x 0.48 mm	1-5	32 dc	0.050, 32 Vdc
121	3.2 x 1.6 x 0.65 mm	0.25-3 4-7 10-20	32 ac/63 dc 32 ac/32 dc 24 ac/24 dc	0.050, 32 Vac/63 Vdc 0.050, 32 Vac/32 Vdc 0.150, 24 Vac/24 Vdc
124	3.2 x 1.6 x 0.65 mm	0.25-1.5	125 ac/125 dc	0.050, 125 Vac/125 Vdc
718	20 x 21.5 x 5.5 mm	1-40	32 dc	1.0, 32 Vdc
241	2.6 x 2.6 x 6.1 mm	2-5 6.3 7.0 8.0 10.0 12-15	125 ac/125 dc	0.050, 125 Vac 0.300, 125 Vdc 0.063, 125 Vac 0.300, 125 Vdc 0.070, 125 Vac 0.300, 125 Vdc 0.080, 125 Vac 0.300, 125 Vdc 0.100, 125 Vac 0.300, 125 Vdc 0.050, 125 Vac 0.300, 125 Vdc
123	3.2 x 1.6 x 0.65 mm	1-44.5-5	12 ac/63 dc 12 ac/32 dc	0.050, 12 Vac 0.050, 63 Vdc 0.100, 12 Vac 0.100, 32 Vdc
211 by followed by 1 or 2, followed by three digit number	3.0 x 7.2 mm	3.15-10 A 12-20 A	125 250 16 32	0.035, 125 V ac 0.035, 250 V ac 0.100, 16 V ac 0.050, 32 V ac
932 Series	4.0 x 8.5mm	0.1-6.3A	125/250/300 ac	100A/125 Vac 100A/250 Vac 50A/ 300 Vac
212 series	3.0 x 7.2 mm	3-6.3A	125 250	0.035, 125 V ac 0.035, 250 V ac

Marking: Company name or catalog designation.

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Fuses, Supplemental

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DONGGUAN BETTER ELECTRONIC TECHNOLOGY CO LTD
NAMEN VILLAGE
HENGKEN ADMINISTRATIVE ZONE
LIAOBU TOWN
DONGGUAN, GUANGDONG 523413 CHINA

E300003

Cat. No.	Size	Amps	V ac	Interrupting Rating (kA)
611	6.35 x 32 mm	0.5	125/250	10, 125 V ac, 0.035, 250 V ac
	6.35 x 32 mm	1.0-3.0A	125/250	10, 125 V ac, 0.100, 250 V ac
	6.35 x 32 mm	4.0-10A	125/250	10, 125 V ac, 0.200, 250 V ac
311, 312	3.6 x 10 mm	0.25-10A	125/250	0.050, 125/250 Vac
614	6.35 x 31.8 mm	500 mA	125/250	10, 125 V ac, 0.035, 250 V ac
	6.35 x 31.8 mm	1A-3A	125/250	10, 125 V ac, 0.100, 250 V ac
	6.35 x 31.8 mm	0.5-1A	125/250	10, 125 V ac, 0.035, 250 V ac
		1.1-3.5A	125/250	10, 125 V ac, 0.100, 250 V ac
613	6.35 x 31.8 mm	3.6-8.0A	125/250	10, 125 V ac, 0.200, 250 V ac
		0.5-1A	125/250	10, 125 V ac, 0.035, 250 V ac
		1.1-3.5A	125/250	10, 125 V ac, 0.100, 250 V ac
		3.6-10.0A	125/250	10, 125 V ac, 0.200, 250 V ac
		0.25-10A	125/250	0.05, 125 V ac 0.05, 250 V ac
		0.25-10A	125/250	0.05, 125 V ac 0.05, 250 V ac
211 by followed by 0 or 1, followed by three digit number	3.0 x 7.2 mm	0.1-2.5A	125/250	0.05, 125 V ac 0.05, 250 V ac
212 series	3.0 x 7.2 mm	0.1-2.5A	125/250	0.05, 125 V ac 0.05, 250 V ac

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