

# Engineering Product Specifications

## (产品承认书)

**Customer Name (客户):** \_\_\_\_\_

**Customer NO. (客户料号):** \_\_\_\_\_

**Model No. (产品型号):** \_\_\_\_\_

**Product Description (品名):** **Fast/ Medium-Acting British Plug Top Fuse**

**Part NO. (产品编号):** **AF63 series**

**Remark:** \_\_\_\_\_

Document Release		Date(日期)
Prepared by (制表)		
Checked by (审核)		
Approved by (批准)		

Customer Approval		Date(日期)
Signed by (承认)		
Checked by (审核)		
Approved by (批准)		

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## 1. SCOPE AND DESCRIPTION



Following electronic product specifications apply to fuses of the AF63 series. The AF63 series is a fast to medium-acting British plug top fuse for over-current protection.

With its high breaking capacity and high voltage ratings, low power dissipation it is primarily designed for domestic British plug protection and similar purposes.

## 2. GENERAL INFORMATION



### General Description

The AF63 series British plug fuse provides protection for domestic power plugs that need a high breaking capacity rating and voltage rating, as well as low power dissipation characteristics. The miniature fuse is constructed of a ceramic tube, base and copper caps. It offers excellent mounting characteristics and is 100% tested for cold resistance.

### Detailed Features

- Miniature fuse with quick/medium-acting, high breaking capacity and high voltage ratings
- Small, tubular, without leads.
- Copper caps / ceramic fuse body.
- Protection against harmful over-currents in primary and secondary applications.
- Lead-free, Halogen-free, RoHS compliant
- Designed according to BS1362-1973

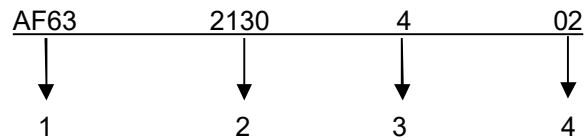
## 3. AGENCY APPROVALS

Agency	Agency File Number	Ampere/ Voltage Range
	201201038561668	1A; 3A; 5A; 10A; 13A
	974	3A; 5A; 10A; 13A
<b>SS167</b>	150339-11 150340-11 150341-11 150342-11	3A; 5A; 10A; 13A

## 4. PART NUMBERING SYSTEM

### 4.1 Part Number

Example: AF632130402



1 .....	Product Series .....	AF63
2 .....	Ampere Rating/ Code .....	13A (see table 4.3 below)
3 .....	Voltage Rating .....	4 – 240V
4 .....	Packaging Code .....	(see table 4.2 below)

### 4.2 Packaging Code Table

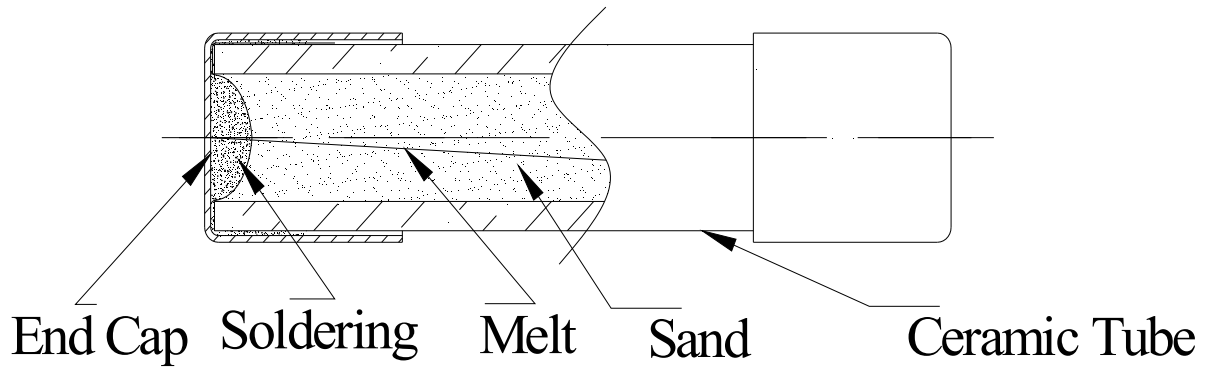
CODE	DESIGNATION
<b>00</b>	No Leads
<b>02</b>	Normal

### 4.3. Ampere Rating Table

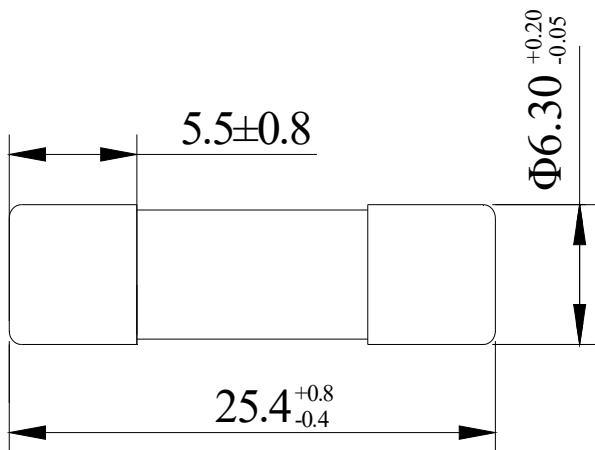
AMP CODE	CURRENT RATING	VOLTAGE RATING
<b>1100</b>	1A	240V AC
<b>1200</b>	2A	240V AC
<b>1300</b>	3A	240V AC
<b>1500</b>	5A	240V AC
<b>1700</b>	7A	240V AC
<b>2100</b>	10A	240V AC
<b>2130</b>	13A	240V AC

## 5. CONSTRUCTION AND MECHANICAL CHARACTERISTICS

### Construction (cross section)



### Dimensions (units: 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

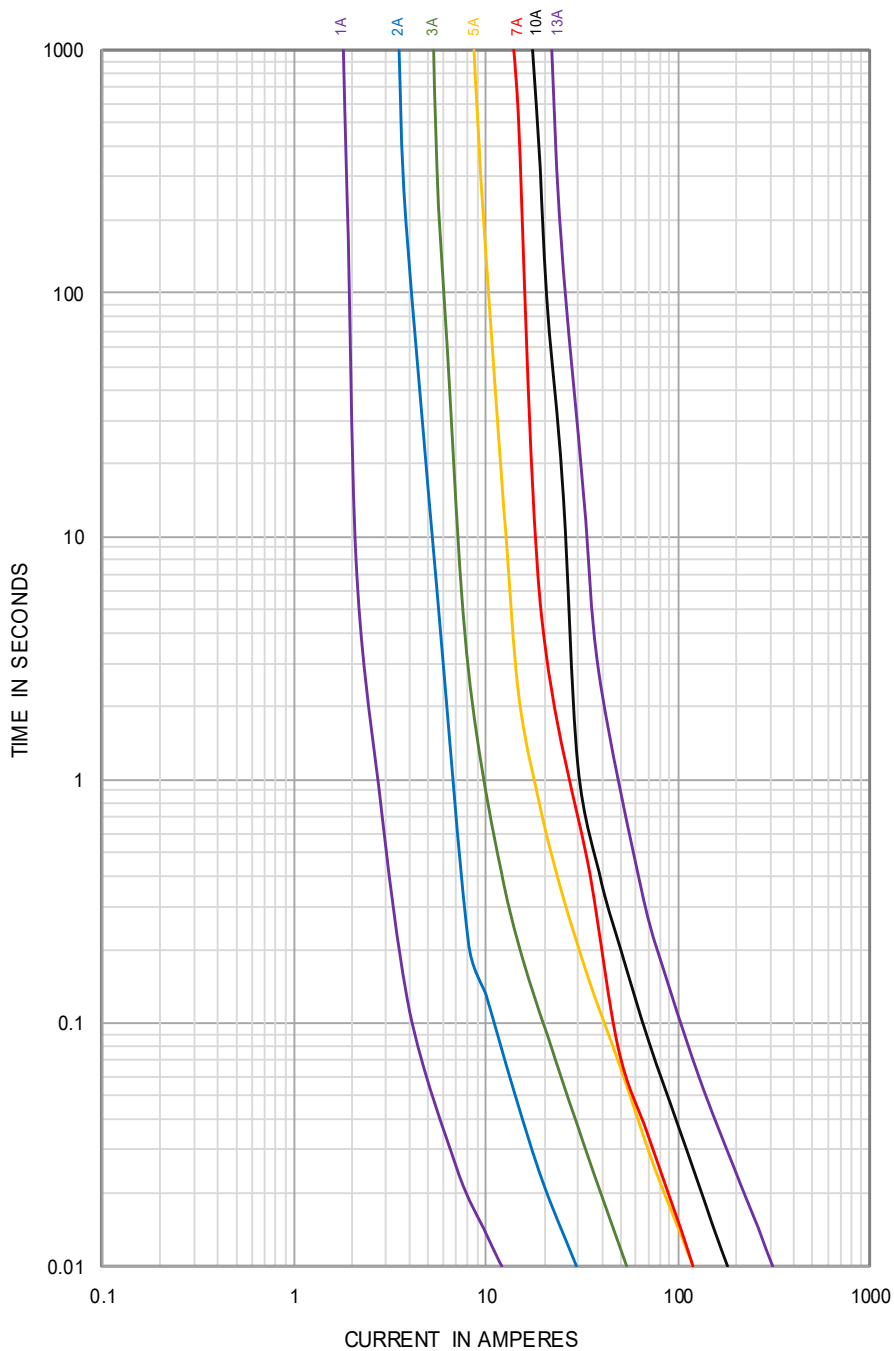
## 6. ELECTRICAL SPECIFICATIONS

### Time vs Current Characteristics Table

(measured with constant current power supply) (according to BS1362-1973)

Rated Current	100%	160%	190%
1A ~13A	>1000h	>30min	<30min

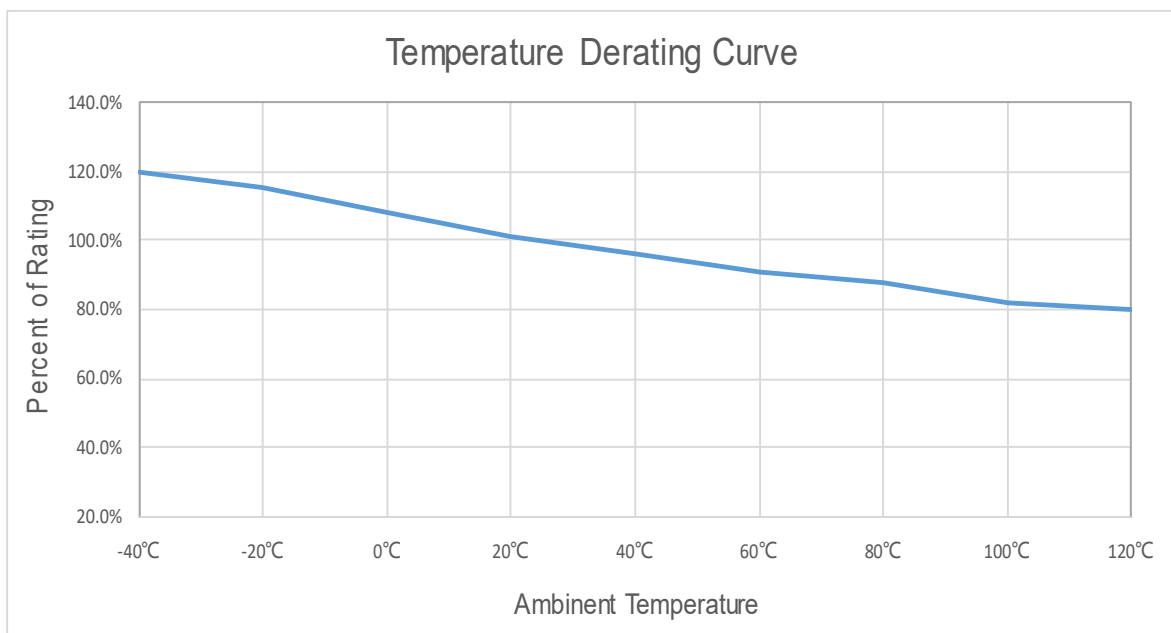
### Average Time Current(I-T Curve)



## Electrical characteristics

Electrical Characteristics									
Amp Code	Rated Current	Max. Voltage	Breaking Capacity	Nominal Melting $I^2t(A^2sec)$	Max. Power Dissipation	Color	Approvals		
							CCC	PSB	ASTA
1100	1A	264V AC	6kA@ 264V AC 50Hz P.f.0.3-0.4	1.44	1W	black	●	○	○
1200	2A			8.73		black	○	○	○
1300	3A			29.16		red	●	●	●
1500	5A			144		black	●	●	●
1700	7A			146.4		black	○	○	○
2100	10A			324		black	●	●	●
2130	13A			961		brown	●	●	●

## Temperature Derating Curve



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

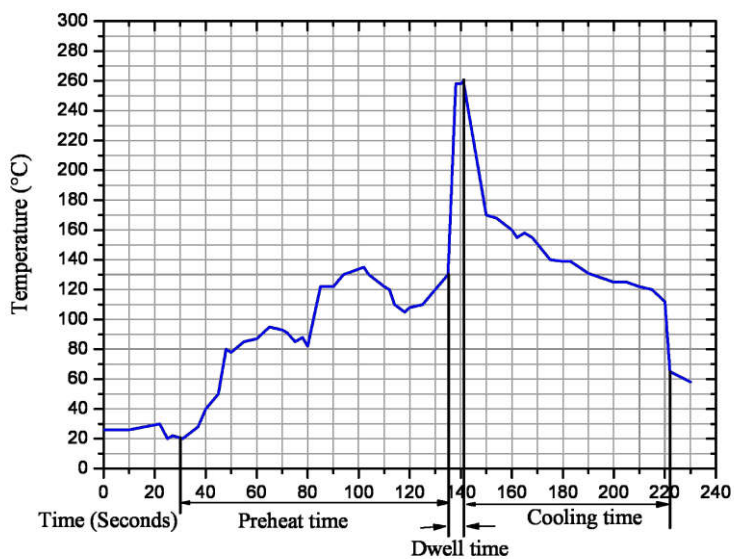
## 7. SOLDERING PARAMETERS

260°C .≤5 sec (Wave Soldering)

350°C .≤3 sec (Hand Soldering)

Soldering Peak:

260°C - 10 sec (IEC 60068-20)



## 8. ORDERING INFORMATION

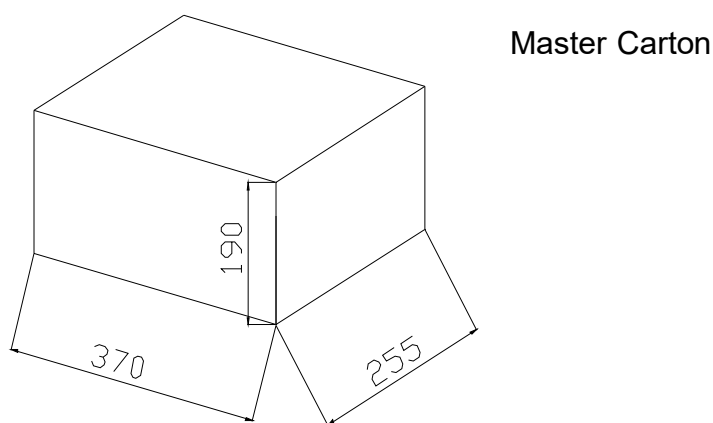
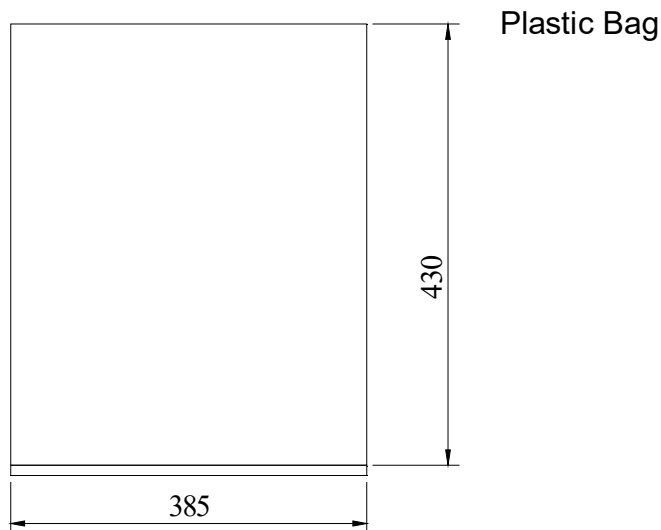
The following information are necessary in order to place your order with us correctly:

Series	Amp Code	Supplementary Code	Qty
AF63			



## 9. PACKING INFORMATION

### Packing details



Net weight per bag	1.2kg	Gross weight per carton	25kg
Qty per bag	500pcs	Qty per carton	10000pcs

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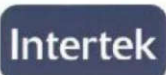
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## 10. APPENDIX



**Intertek**

The ASTA Diamond Mark is a symbol of electrical safety. It provides evidence for customers and authorities that Intertek has independently tested and certified the product's compliance to applicable safety standards, also that Intertek monitors production and testing to ensure subsequent production continues to comply with stated standards.

This licence is valid until the review date or earlier if preceded by the withdrawal of the Approval Standard or otherwise withdrawn by the Certification Body. Current validity status can be confirmed by contacting: Intertek, Hillon House, Corporation Street, Rugby, CV21 2DN United Kingdom. Tel: +44 (0)1788 578435 asta@intertek.com

Details of Approved variants, components and sites are given on Endorsements to this Licence (2 pages)



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www.intertek.com

## ASTA Licence

This Licence authorises use of the

### ASTA Diamond Mark

Licence No. 974

**Organisation:**

**AsiaFuse (HK) Electronics Limited**

Room 703 Kowloon Building, 555 Nathan Road, Kowloon, Hong Kong

**Product:**

**General Purpose Fuse Links  
for Domestic & Similar Purposes  
AF63B-3A, AF63B-5A, AF63C-10A  
AF63-13A**

**Designation:**

240 Volts a.c. 50 Hz  
Breaking capacity 6kA rms  
Rated power loss less than 1 watt

**Approval Standard:**

BS 1362: 1973 plus Amendments 1 & 2

**Issue number:**

4

**Review date:**

31<sup>st</sup> December 2019

**Factory Reference:**

BETTGN.A1

R W Hayward

Name

Signature

19<sup>th</sup> December 2014

Date



# 中国国家强制性产品认证证书

证书编号: 2012010308561668

## 委托人名称、地址

艾弗电子(香港)有限公司  
中国香港九龙弥敦道555号九龙行703室

## 生产者(制造商)名称、地址

艾弗电子(香港)有限公司  
中国香港九龙弥敦道555号九龙行703室

## 生产企业名称、地址

东莞市贝特电子科技股份有限公司  
广东省东莞市寮步镇横坑南门村第二工业区C座、B座

## 产品名称和系列、规格、型号

低压熔断器

AF63C-1A, AF63B-3A, AF63B-5A, AF63C-10A, AF63-13A;  
Un: AC240V; In: 1A, 3A, 5A, 10A, 13A; I1: 6kA; 分断范围类型和使用类别: gG

## 产品标准和技术要求

GB 13539.3-2008

上述产品符合强制性产品认证实施规则  
CNCA-C03-02: 2014的要求, 特发此证。

发证日期: 2016年12月23日      有效期至: 2021年12月23日

证书有效期内本证书的有效性依据发证机构的定期监督获得保持。

本证书为变更证书, 证书首次颁发日期: 2012年08月15日

本证书的相关信息可通过国家认监委网站www.cnca.gov.cn查询



主任:

中国质量认证中心

中国·北京·南四环西路188号9区100070

<http://www.cqc.com.cn>





# CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

No. : 2012010308561668

## NAME AND ADDRESS OF THE APPLICANT

ASIAFUSE (HK) ELECTRONICS LIMITED  
PLAT/RM 703, KOWLON BUILDING, 555 NANTHAN ROAD, KL, HONGKONG, P. R. CHINA

## NAME AND ADDRESS OF THE MANUFACTURER

ASIAFUSE (HK) ELECTRONICS LIMITED  
PLAT/RM 703, KOWLON BUILDING, 555 NANTHAN ROAD, KL, HONGKONG, P. R. CHINA

## NAME AND ADDRESS OF THE FACTORY

Dongguan Better Electronics technology Co. ltd.  
NanMen Village, HengKen Administrative Zone Liao Bu Town,  
Dongguan, Guandong. China.

## NAME, MODEL AND SPECIFICATION

Low-voltage fuses

AF63C-1A, AF63B-3A, AF63B-5A, AF63C-10A, AF63-13A;  
Un:AC240V;In:1A, 3A, 5A, 10A, 13A;I1:6kA;Breaking Range and Utilization  
Category:gG

## THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS

GB 13539. 3-2008

This is to certify that the above mentioned products have met the requirements of implementation rules for compulsory certification(REF NO. CNCA-C03-02:2014).

Date of issue: Dec.23, 2016      Date of expiry: Dec.23, 2021

Validity of this certificate is subject to positive result of the regular follow up inspection by issuing certification body until the expiry date.

Date of original certification: Aug.15, 2012

This certificate can be verified through CNCA's website: [www.cnca.gov.cn](http://www.cnca.gov.cn)



President:

Wang Kejiao



**CHINA QUALITY CERTIFICATION CENTRE**

Section 9, No.188, Nansihuan Xilu, Beijing 100070 P.R.China

<http://www.cqc.com.cn>

Q 1595278



PSB Singapore

THE SINGAPORE CONSUMER PROTECTION  
(SAFETY REQUIREMENTS) REGISTRATION SCHEME

## CERTIFICATE OF CONFORMITY (COC)

TO: GLD (RS Code)  
Ms Tan Lee Tuan  
Gold Technology Services  
Blk 75 Tampines Ave 1  
#13-08  
Singapore 529781

Date of Certification : 20 March 2015

Date of Expiry : 19 March 2018

Certificate Number : 150339-11

Dear Sir/Madam,

We certify that the following controlled goods complied with the Mandatory Requirements of the Singapore Consumer Protection (Safety Requirements) Registration Scheme:

Description of controlled goods: 3A General Purpose Cartridge Fuse Link

Trade Name: AsiaFuse

Model Number: AF63B-3A

Country where controlled goods are likely to be manufactured: China

Test report number: 7191003298-EEC11/01-YKF

Testing laboratory: TÜV SÜD PSB Pte. Ltd.

Tested according to: SS 167 : Part 1 : 1977 with A1:1995

David Sim

TÜV SÜD PSB

**Important Notice:**

No controlled goods can be supplied in Singapore unless they are registered with the Safety Authority. Please access [www.spring.gov.sg/safety](http://www.spring.gov.sg/safety) for registration procedure.



PSB Singapore

**THE SINGAPORE CONSUMER PROTECTION  
(SAFETY REQUIREMENTS) REGISTRATION SCHEME****CERTIFICATE OF CONFORMITY (COC)**

TO: GLD (RS Code)  
Ms Tan Lee Tuan  
Gold Technology Services  
Blk 75 Tampines Ave 1  
#13-08  
Singapore 529781

Date of Certification : 20 March 2015

Date of Expiry : 19 March 2018

Certificate Number : 150340-11

Dear Sir/Madam,

We certify that the following controlled goods complied with the Mandatory Requirements of the Singapore Consumer Protection (Safety Requirements) Registration Scheme:

Description of controlled goods: 5A General Purpose Cartridge Fuse Link

Trade Name: AsiaFuse

Model Number: AF63B-5A

Country where controlled goods are likely to be manufactured: China

Test report number: 7191003298-EEC11/02-YKF

Testing laboratory: TÜV SÜD PSB Pte. Ltd.

Tested according to: SS 167 : Part 1 : 1977 with A1:1995

David Sim

**TÜV SÜD PSB**

**Important Notice:**

No controlled goods can be supplied in Singapore unless they are registered with the Safety Authority. Please access [www.spring.gov.sg/safety](http://www.spring.gov.sg/safety) for registration procedure.



PSB Singapore

THE SINGAPORE CONSUMER PROTECTION  
(SAFETY REQUIREMENTS) REGISTRATION SCHEME

## CERTIFICATE OF CONFORMITY (COC)

TO: GLD (RS Code)  
Ms Tan Lee Tuan  
Gold Technology Services  
Blk 75 Tampines Ave 1  
#13-08  
Singapore 529781

Date of Certification : 20 March 2015

Date of Expiry : 19 March 2018

Certificate Number : 150341-11

Dear Sir/Madam,

We certify that the following controlled goods complied with the Mandatory Requirements of the Singapore Consumer Protection (Safety Requirements) Registration Scheme:

Description of controlled goods: 10A General Purpose Cartridge Fuse Link

Trade Name: AsiaFuse

Model Number: AF63C-10A

Country where controlled goods are likely to be manufactured: China

Test report number: 7191003298-EEC11/03-YKF

Testing laboratory: TÜV SÜD PSB Pte. Ltd.

Tested according to: SS 167 : Part 1 : 1977 with A1:1995

David Sim

TÜV SÜD PSB

**Important Notice:**

No controlled goods can be supplied in Singapore unless they are registered with the Safety Authority. Please access [www.spring.gov.sg/safety](http://www.spring.gov.sg/safety) for registration procedure.



PSB Singapore

**THE SINGAPORE CONSUMER PROTECTION  
(SAFETY REQUIREMENTS) REGISTRATION SCHEME****CERTIFICATE OF CONFORMITY (COC)**

TO: GLD (RS Code)  
Ms Tan Lee Tuan  
Gold Technology Services  
Blk 75 Tampines Ave 1  
#13-08  
Singapore 529781

Date of Certification : 20 March 2015

Date of Expiry : 19 March 2018

Certificate Number : 150342-11

Dear Sir/Madam,

We certify that the following controlled goods complied with the Mandatory Requirements of the Singapore Consumer Protection (Safety Requirements) Registration Scheme:

Description of controlled goods: 13A General Purpose Cartridge Fuse Link

Trade Name: AsiaFuse

Model Number: AF63-13A

Country where controlled goods are likely to be manufactured: China

Test report number: 7191003298-EEC11/04-YKF

Testing laboratory: TÜV SÜD PSB Pte. Ltd.

Tested according to: SS 167 : Part 1 : 1977 with A1:1995

David Sim

**TÜV SÜD PSB**

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No controlled goods can be supplied in Singapore unless they are registered with the Safety Authority. Please access [www.spring.gov.sg/safety](http://www.spring.gov.sg/safety) for registration procedure.