



功得電子工業股份有限公司
CONQUER ELECTRONICS CO.,LTD.

規格書

Spec. No. SFA042

Specification For Approval

品名： ABB/ABB-A 系列
快快速型瓷管保險絲 1A~30A

Type： ABB/ABB-A Series
Super Fast Acting Ceramic Tube Fuse 1A~30A

www.conquer.com.tw

五股廠：新北市五股區五權五路26號(新北產業園區)
Wugu Factory:No.26, Wucyuan 5th Rd., Wugu Dist.,
(New Taipei Industrial Park) New Taipei City
24888, Taiwan
TEL:+886-2-89902189(Rep.)
+886-2-2CONQUER(Rep.)
FAX:+886-2-8990-2577

北投廠：台北市北投區立德路120巷15號
Peitou Factory:No. 15, Lite Road, Peitou,
Taipei11259, Taiwan.
TEL:+886-2-2895-8895(代表號)
FAX:+886-2-2895-8880



～ 筒管狀保險絲 ～

Fuses for Instrument, Power and Telephone (Non-indicating)

1 適用範圍: 本標準適用於保護儀器、電源供應器和電話機用之筒管式熔斷保險絲。
Available Range: For protecting instruments, power supplies and telephone sets.

2 形狀及尺寸如下圖 單位: mm
Shape & Size as following illustrations.

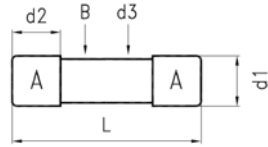


ABB Series

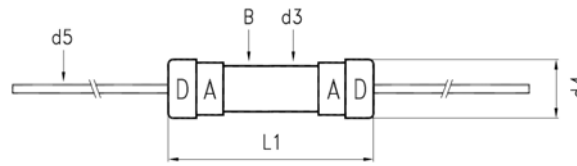


ABB-A Series

2.1 構造形狀 Structure & Shape : 如上圖 As shown in figure above

2.2 額定電壓 Rated Voltage: 500V

2.3 額定電流 Rated Current: 1A~30A

3 材料 Material:

3.1 筒管本體: 不透明瓷管不可破裂或變形。

Tube (Body): Non-Transparent ceramic tube fuse. No breaking or deformation is allowed.

3.2 兩端銅蓋: 需以導電率良好之黃銅為材料。

Two brass end caps: Made of brass of good conductivity.

3.3 銅蓋處理: 銅蓋部份鍍鎳, 標示最後若加 "S" 者, 表示須鍍銀。

Coating of brass caps: Plating the surface with nickel. If the indication is added with "S", it needs to be plated with silver.

NO.	Part Name 部品名稱	Volume 數量
A	Brass Cap - Nickel Plating 銅帽 - 鍍鎳	2
B	Ceramic Tube - Non-Transparent Ceramic Tube 瓷管 - 不透明瓷管	1
C	Fuse Element 可熔體	1
D	Cap-on Lead-Cap - Tinned Copper Wire and Cap 銅帽附腳 - 銅蓋加鍍錫銅線	2
d1	Dia. of Cap - 6.35±0.1mm 銅頭直徑	
d2	Height of Cap - 6.45±0.1mm 銅頭高度	
d3	Dia. of Ceramic - 5.72±0.2mm 瓷管直徑	
d4	Dia. of Cap - 7.00±0.3mm 銅帽直徑	
d5	Dia. of Lead Wire - (註1)±0.05mm 附腳直徑 Length of Lead Wire - 38±2mm 長度	
L	Body of Fuse - 31.75±0.75mm 本體尺寸	
L1	Total Length W/Cap-on on Both Ends 33.0±0.75mm	

Conquer Electronics Co., LTD.

No.26, Wucyuan 5th Rd., Wugu Dist.,(New Taipei Industrial Park) New Taipei City 24888, Taiwan TEL:+886-2-8990-2189 (代表號) FAX:+886-2-8990-2577

Peitou Factory : No. 15, Lane 120, Lite Road, Peitou, 11259, Taipei, Taiwan. TEL: +886-2-2895-8895 (代表號) FAX:+886-2-2895-8880

E-mail: conqfuse@ms62.hinet.net Official Website: http://www.conquer.com.tw



※註1 (Note1)

安培數	腳徑
Ampere Rating	Lead Wire
≤12.9A	φ 0.8 mm
13A~14.9A	φ 1.0 mm
≥15A	φ 1.2 mm

4 電氣特性 Electrical Characteristics:

- 4.1 負載容量: 通過額定電流值 100 % (亦即 1.0 x In A), 能繼續通電至少 4 小時無任何熔化現象。
Loading Capacity: Loading 100% Rated Current (i.e. 1.0 x In A) for flowing, and it's available to let current keep on flowing at least 4 hour without any melting. (Can keep 4 Hour minimum)
- 4.2 溫度特性: 通過額定電流值 100% (亦即 1.0 x In A) 1.5 小時, 繼續維持原加之電流, 每隔十分鐘測試一次, 連續測三次, 溫度不得升高, 若使用熱偶式測量方法。(Thermocouple method) 則本體溫升在 180°C 以下。
Temperature: Loading the 100 % (1.0 x In A) for 1.5 hours, keep testing it with the original current every 10 minutes. Continue to test it for 3 times. The temperature is not allowed to be higher. The main temperature rise is below 180°C by way of Thermocouple Method.

- 4.3 過載熔斷: 請參照下表。Melting due to overloading: Details as follows Table.

※最大熔斷時限 Operating Characteristics

安培數 Rating	100% Rating		135% Rating		250% Rating	
	Min.	Max.	Min.	Max.	Min.	Max.
1A~15A	4 Hrs			120 sec		0.2 sec
15.1A~30A	4 Hrs			300 sec		3 sec

5 機械特性 Mechanical Properties:

- 5.1 拉力強度: 當施加軸拉力 720g/cm 於兩端附腳 (或銅帽), 無鬆動或損壞現象發生。
Terminal Strength: Leads and/or caps are soldered (adhered) to withstand axial pulling force of 720g/cm without loosening or any harmfulness to firmly attachment.
- 5.2 彎折強度 Bending Strength:
- (1) 銅帽附腳腳徑 1.0mm (含) 以下, 經過兩次反向之彎折後 (彎折 90 度再折回原位謂之一次彎折) 不發生損壞。
Diameter of lead wire ≤ 1.0 mm: After two bends of opposite directions (bending through an angle of 90° and back is defined as one bend) of lead, no damage is to be visualized.
- (2) 銅帽附腳腳徑 1.2mm (含) 以上, 距離銅帽附腳卯合處 10mm 以上, 作一次 90 度之彎折, 不發生損壞。
Diameter of lead wire ≥ 1.2 mm: Only one bend of an angle of 90° without back shall be tested for each lead wire and the bending position shall be at least 10mm a way from the cap-on. After the test there shall be no damage to be visualized.



6 **突波實驗**:為適應電感或電容性電路所產之暫態電流，本品可承受最少1ms 10 In 電流之突波。

Surge Test: In order to stand transient current caused by inductive or capacitive, the fuses are designed to have minimum clearing time of 1 millisecond at 1000% rated current.

7 **脈波實驗**:本實驗乃保證產品之壽命與可靠度，施加60%額定電流之脈波，1分鐘ON，2分鐘OFF，1000次以後，本品不熔斷且內阻變化20%以下。

Cycle Test (On-Off Test):This test is designed to assure a reliable fuse, Controls are set giving 60% of rated ampere. 1 minute ON, 2 minutes OFF per time, the fuse will not open before 1000 times and the internal resistance change will be below 20%.

8 **遮斷能力** Interrupting rating:

1A~20A 200 amperes at 500V AC

20.1A~30A 100 amperes at 500V AC

9 **包裝** Packing :

ABB-500 PCS/盒 ; ABB-A-250 PCS/盒 內盒印明下列標示:料號、額定(電壓、電流、遮斷能力)及安規名稱。包裝材料均符合RoHS或者HF的環保要求,且包裝材料不會和零件發生化學反應，造成不良。

ABB-500 pcs in an inner box. ; ABB-A-250 pcs in an inner box. The following items indicated on the box. Mark: Catalog number; ratings (voltage, current, interrupting capacity), and safety mark.

The packing material conforms to RoHS or the HF environmental protection request.

And the packing material can't have the chemical reaction with the components.

10 **其他** Other:

10.1 除非另有指定，上述機械、電器特性，係於常溫，標準狀況下測試之。

Unless otherwise, specified, all tests to be performed at $25\pm 5^{\circ}\text{C}$ and 35-75% RH.

10.2 於標準狀況下儲放一年，本品乃確保上述機械與電氣之特性。

After one year's storage under normal condition, this item is guaranteed to meet the requirements mentioned above.

11 **標記/安規認證** Mark/ Safety certification:

ABB/ABB-A 1A~30A Approval : 

12 **系列品名列表** series model list :

品名	安培數
CRU ABB ___A ___V(PF)	1A~30A
CRU ABB-A ___A ___V(PF)	

Conquer Electronics Co., LTD.

No.26, Wucyuan 5th Rd., Wugu Dist.,(New Taipei Industrial Park) New Taipei City 24888, Taiwan TEL:+886-2-8990-2189 (代表號) FAX:+886-2-8990-2577

Peitou Factory : No. 15, Lane 120, Lite Road, Peitou, 11259, Taipei, Taiwan. TEL: +886-2-2895-8895 (代表號) FAX:+886-2-2895-8880

E-mail: conqfuse@ms62.hinet.net Official Website: <http://www.conquer.com.tw>



例： CRU ABB A V (PF)
 1 2 3 4 5

- 1 安規認證 Safety Approval
- 2 系列品名 Series Model : ABB/ABB-A
- 3 安培數 Ampere Rating : 1A~30A
- 4 伏特數 Voltage : 500V
- 5 無鉛標示 mean : Pb free (PF)

Conquer Electronics Co., LTD.

No.26, Wucyuan 5th Rd., Wugu Dist.,(New Taipei Industrial Park) New Taipei City 24888, Taiwan TEL:+886-2-8990-2189 (代表號) FAX:+886-2-8990-2577

Peitou Factory : No. 15, Lane 120, Lite Road, Peitou, 11259, Taipei, Taiwan. TEL: +886-2-2895-8895 (代表號) FAX:+886-2-2895-8880

E-mail: conqfuse@ms62.hinet.net Official Website: <http://www.conquer.com.tw>