


### 1. 適用範圍 / SCOPE

2410H 系列抗浪湧型保險絲，適用於一般電子設備。  
2410H series High Inrush Fuse, used in electronic equipment.

### 2. 產品編碼 / Part Numbering

例「example」：

2410H	1A	250V	
①	②	③	④

- ① 系列號/Series Number
- ② 額定電流/Rated Current
- ③ 額定電壓/Rated Voltage
- ④ 認證符號/Approved Symbol

### 3. 額定電流和額定電壓/ RATED CURRENT AND RATED VOLTAGE

額定電流 / Rated Current:

1.0A~5.0A

額定電壓 / Rated Voltage:

1.0A~5.0A : 250 V ac / 125 V dc

### 4. 標示 / MARKING

保險絲上需有下列標示/The fuses shall have the following marking

- ① 產品系列標識 / Series type Logo : SH2
- ② 額定電流 / Rated Current (A): \_\_\_A

注意 / Note :

對標示的大小和位置沒有規定 / Size and position of the markings shall not be provided.

### 5. 外觀及形狀 / APPEARANCES AND CONFIGURATION

5-1 外觀：無顯著的汙點、鐵銹或裂紋；標示應容易辨識。

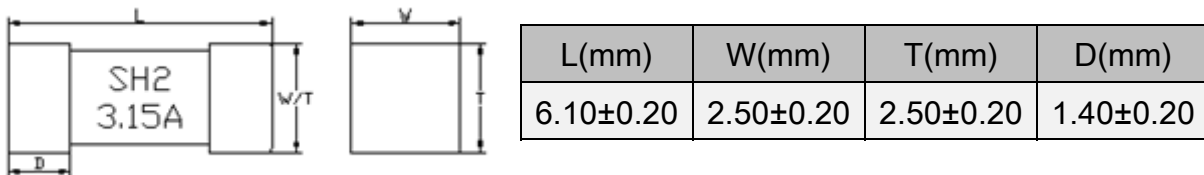
Appearances : There shall not be any remarkable stain, rust or crack on the appearances; marking shall be easily legible.

5-2 形狀：表面貼裝式保險絲

Configuration : Surface Mount Fuse.

### 6. 工程圖和結構 / OUTLINE DRAWING AND STRUCTURE

6-1 工程圖（單位：mm） / Outline Drawing and Dimensions (Unit: mm)



6-2 結構 / Structure

元件 Component	材質 Material	數量 Quantity
銅帽 Cap	黃銅鍍金 Brass with gold plated	2
本體 Body	陶瓷管 Ceramic tube	1

### 7. 產品特性 / PRODUCT CHARACTERISTICS

編號 No.	項目 Item	內容 Content	參考標準 Reference standard
1	絕緣阻抗 Insulation resistance	10,000 ohms minimum	MIL-STD-202G, Method 302 Test Condition A
2	可焊性 Solderability	T=240°C±5°C, t=3+0/-0.5s, Cover ≥ 95%	MIL-STD-202G, Method 208H
3	耐焊接熱 Soldering heat resistance	10 sec at 260 °C  ΔR : <10%	MIL-STD-202G, Method 210F Test Condition B
4	熱衝擊 Thermal Shock	100 cycles between -65°C/+125°C 60 minutes ; each extreme  ΔR : <10%	IEC 60068-2-14
5	高/低溫儲存 High/Low Temperature Storage	T=125°C±2°C, 96hours, T=-55°C±3°C, 96hours  ΔR : <10%	IEC60068-2-1 / IEC60068-2-2
6	高溫操作 High Temperature Operating Life	T=70°C±2°C, 0.6In, 96hours  ΔR : <10%	MIL-STD-202 Method 108
7	耐濕性 Humidity(steady state)	T=40°C±2°C, 90%~95%RH, 1000hours  ΔR : <10%	MIL-STD-202 Method 103
8	鹽霧實驗 Salt spray	5% salt solution, 48hours  ΔR : <10%	MIL-STD-202G, Method 101E, Test Condition B

### 8. 電氣特性 / ELECTRICAL CHARACTERISTICS

#### 8-1 熔斷 / 電流特性：Pre-Arcing Time / Current Characteristic (limits)

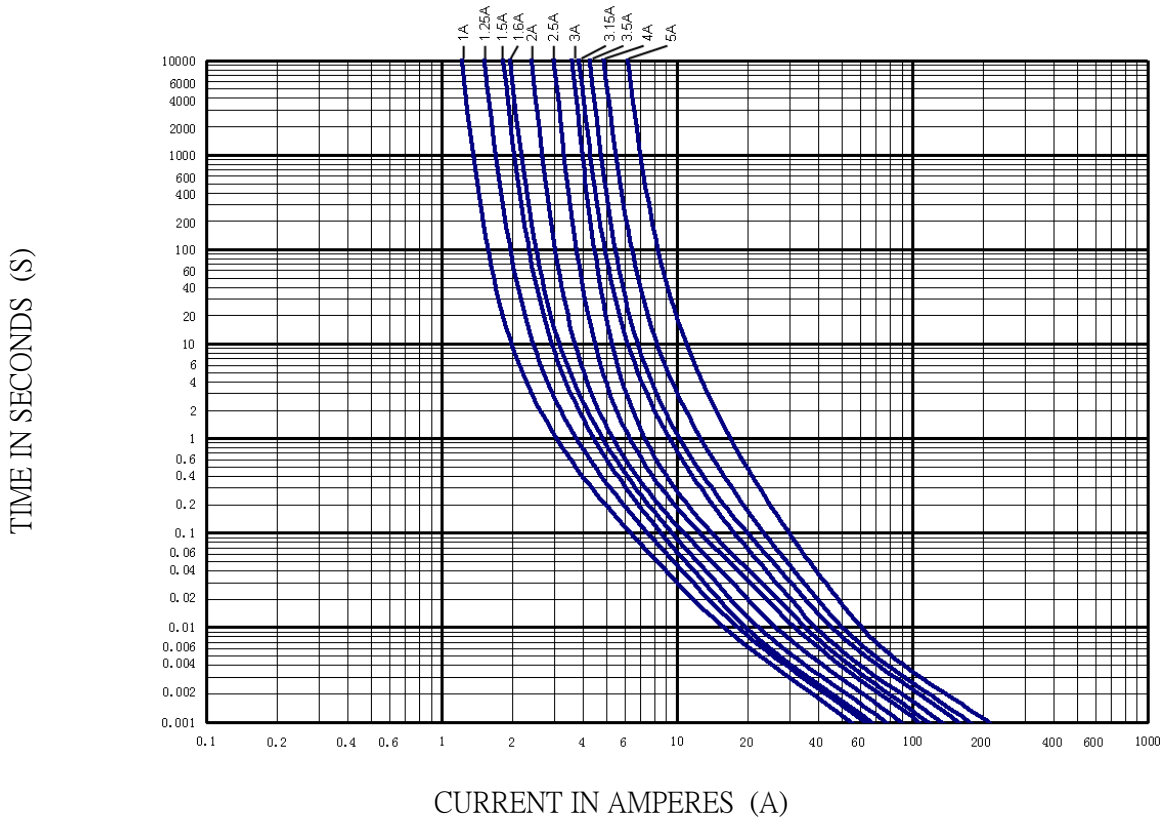
RATED CURRENT	1 In	1.25 In	2 In	10 In	
	Min.	Min.	Max.	Min.	Max.
1.0A~5.0A	4hrs	1hrs	120 s	10ms	60ms

#### 8-2 產品規格/Specification

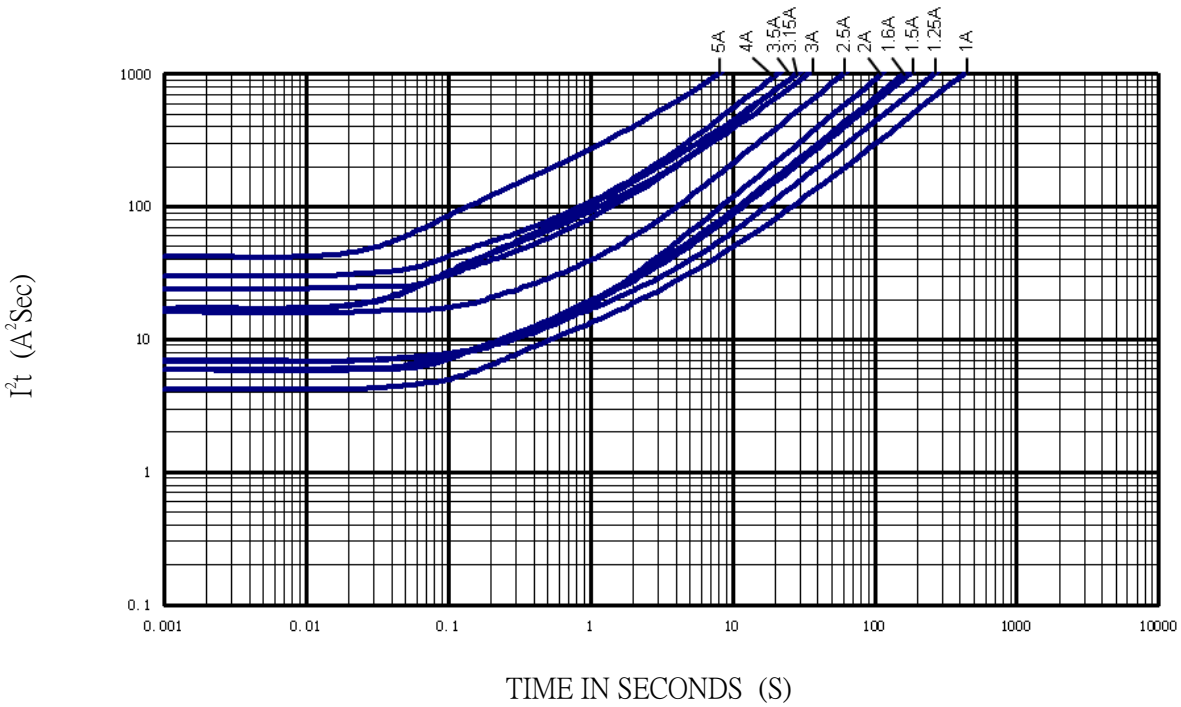
額定電流 Rated Current	額定電壓 Rated Voltage	分斷能力 Breaking Capacity	Typical Cold DCR (mΩ)	Normal I <sup>2</sup> T** (A <sup>2</sup> s)
1.0 A	250Vac	UL / TUV: 50A@250V AC 50A@125V DC PSE: 50A@125V AC	122	3.32
1.25 A	250Vac		88	4.48
1.5 A	250Vac		73	5.11
1.6 A	250Vac		65	6.13
2.0 A	250Vac		52	6.95
2.5 A	250Vac		37	14.42
3.0 A	250Vac		25	15.33
3.15 A	250Vac		23	18.12
3.5 A	250Vac		22	22.51
4.0 A	250Vac		18	26.45
5.0 A	250Vac		12	31.28

\*\* Melting I<sup>2</sup>T at 10 times of rated current

8-3 I-t 圖/CHARACTERISTICS DIAGRAM(I-t)



8-4  $I^2t-t$  圖/CHARACTERISTICS DIAGRAM( $I^2t-t$ )



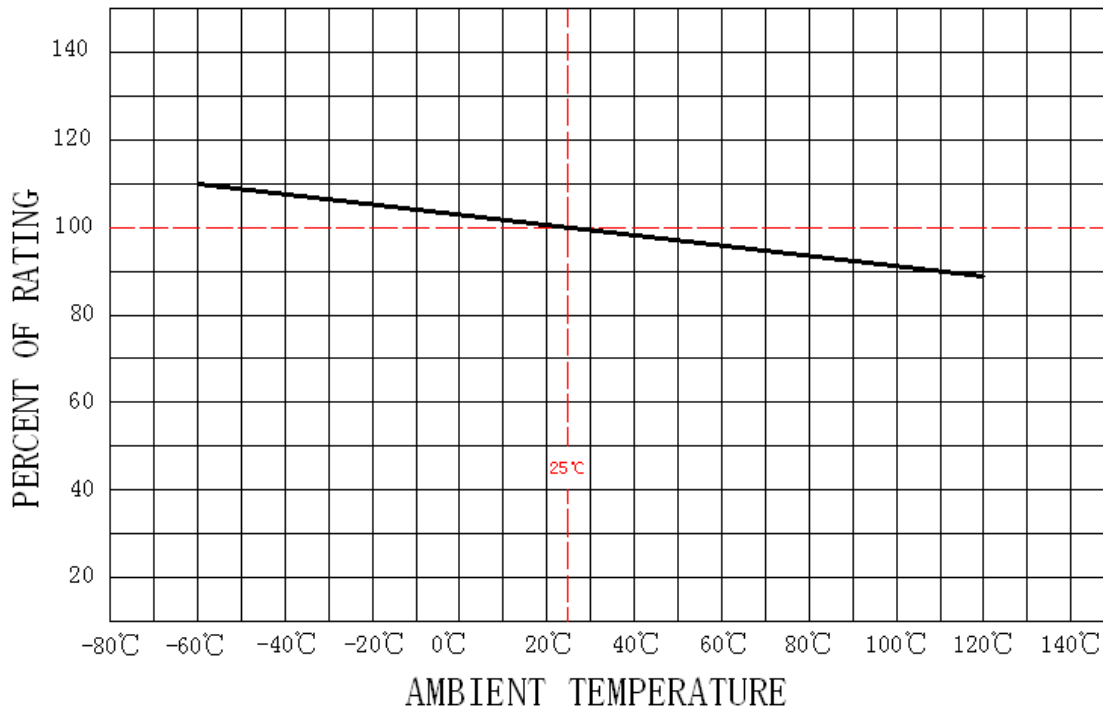
### 9. 環境特性 / ENVIRONMENTAL CHARACTERISTIC

操作溫度範圍:  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  / Operating Temperature:  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$

若貴司操作環境溫度超出 $25 \pm 5^{\circ}\text{C}$ 範圍，在選用保險絲規格時，需考慮操作環境溫度對保險絲的影響。  
請參照：溫度-電流曲線圖。

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from  $20 \sim 30^{\circ}\text{C}$ , you should consider the environmental temperature's affection to fuses.  
please refer:

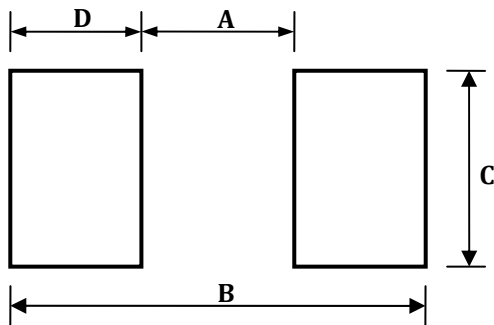
Temperature-Current curve:



### 10. 安裝方式及條件 / INSTALLATION WAY AND PARAMETERS

10-1 建議如下圖安裝方式安裝，並滿足所要求的尺寸。

Propose that the following picture installation way is installed, and satisfied the required size.



Dimensions	A(mm)	B(mm)	C(mm)	D(mm)
2410H	$3.00 \pm 0.30$	$8.00 \pm 0.30$	$3.00 \pm 0.30$	$2.50 \pm 0.30$

### 10-2 建議客戶焊接參數 / Recommended Customer Soldering Parameters

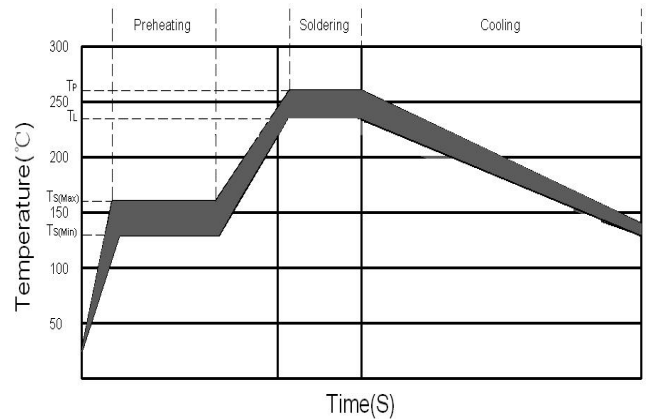
#### 1. Infrared Reflow:

Temperature : 260°C

Time : 5sec Max.

Recommend Reflow profile

Reflow Condition		Pb-Free assembly
Preheating	-Temperature Min (Ts(min))	150 °C
	-Temperature Max (Ts(max))	200 °C
	-Time	60~120 Secs
Soldering	-Temperature (TL)(Liquidus)	235 °C
	-Time Max (TL)	20~40Secs
	-Peak Temperature (Tp)	Max 260 °C
	-Time Max (Tp)	5 Secs



#### 2. Wave soldering

Reservoir Temperature : 260°C

Time in Reservoir : 10sec Max.

#### 3. Hand Soldering :

Temperature : 300°C

Time : 2sec Max.

Soldering iron avoid touch Brass Cap.

### 11. 其他使用注意事項 / OTHER NOTICE IN USED

符合本公司可能的其它文件的要求。

It could be in conformance with another file which made by our company.

### 12. 安全認證及編號 / STANDARDS AND APPROVALS

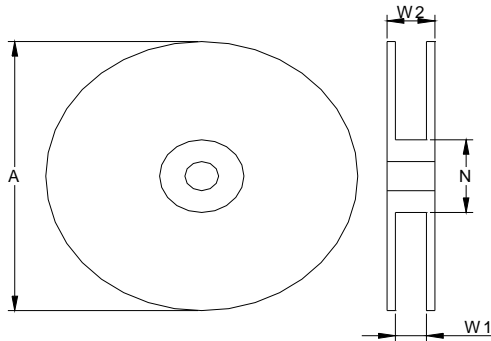
UR	NO. :	E56092
C-UR	NO. :	E56092
TUV	NO. :	J 50298144(1A~5A)
PSE	NO. :	JET5360-31007-2003 (1A~5A)

### 13. 包裝訊息 / PACKING INFORMATION

#### 13-1 包裝數量、重量 / QUANTITY & WEIGHT

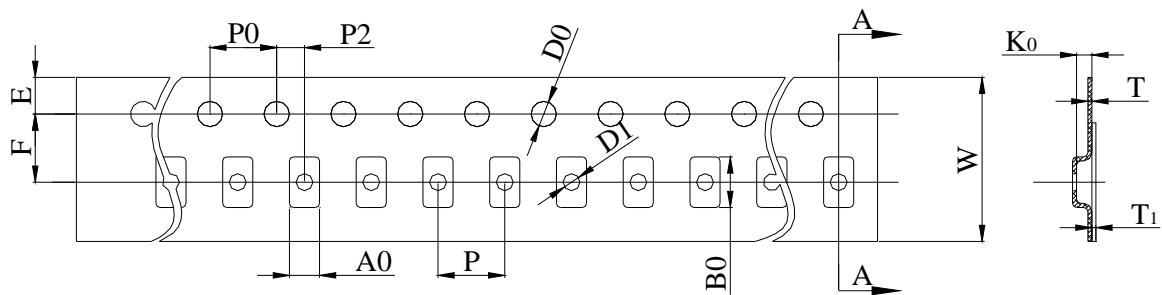
型號 Type Number	數量(pcs) Quantity(pcs)
2410H	1,000

#### 13-2 捲輪規格 / Reel & Tape specifications



Unit(mm)

$A \pm 2$	$N \pm 2$	$W1 \pm 1$	$W2 \pm 1.5$
178	58	12.5	14.5

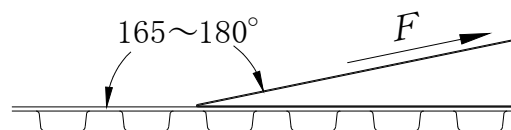


Unit(mm)

<b>W</b>	<b>12.0 ± 0.15</b>	<b>D0</b>	<b>1.50 ± 0.10</b>
<b>P0</b>	<b>4.00 ± 0.10</b>	<b>F</b>	<b>5.50 ± 0.10</b>
<b>P</b>	<b>4.00 ± 0.10</b>	<b>E</b>	<b>1.75 ± 0.10</b>
<b>P2</b>	<b>2.00 ± 0.10</b>	<b>T</b>	<b>0.25 ± 0.05</b>
<b>A0</b>	<b>2.70 ± 0.10</b>	<b>T1</b>	<b>Max. 0.1</b>
<b>B0</b>	<b>6.40 ± 0.10</b>	<b>K0</b>	<b>2.70 ± 0.10</b>


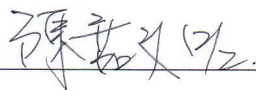

#### 13-3 密封膠膜剝離強度要求 / Peeling Strength of Seal Tape

F = 剝離強度 : 0.1 – 1.0N ( 10 - 100gf )



14. 其他 / OTHERS

- 14-1 如果在使用中有超出本規格書的要求，必須經由雙方協商確認。  
In the event that an impropriety is found beyond this specification ,it shall be fixed by mutual agreement between the parties.
- 14-2 如果本規格書有不適當的情況，必須通過雙方協商並由本公司修改。  
In the event that an impropriety is found in this specification , WALTER ELECTRONIC CO., LTD. shall amend it by mutual agreement between the parties.

版次	製作	確認	審核
第五版			



单击下面可查看定价，库存，交付和生命周期等信息

[>>Walter\(华德\)](#)