

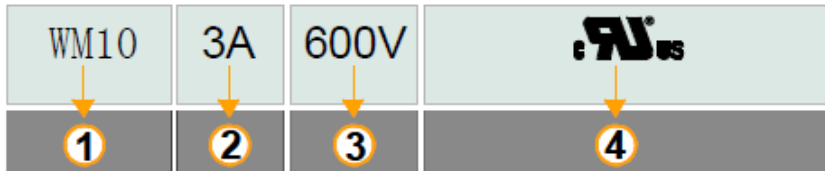


1. 適用範圍 / SCOPE

WM10 系列小型保險絲，適用於數字儀表。
WM10 series Miniature-Fuse, used in Digital Measuring Instruments

2. 產品型號 / TYPE

例「example」：



- 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: 200mA~12A

額定電壓 / Rated Voltage: 600V AC/ DC

4. 標示 / MARKING

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

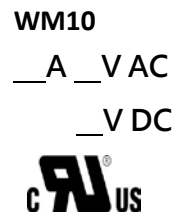
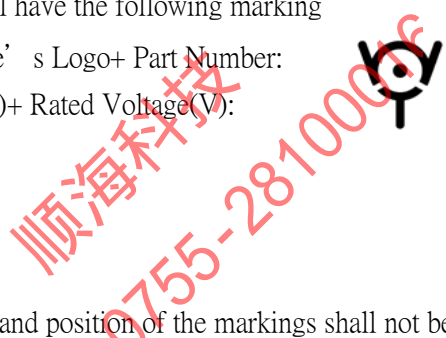
製造工廠的標識+系列號/ Manufacture' s Logo+ Part Number:

額定電流+額定電壓/ Rated Current (A)+ Rated Voltage(V):

認證符號/ Approved Symbol

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：不應有破碎、明顯的污斑。

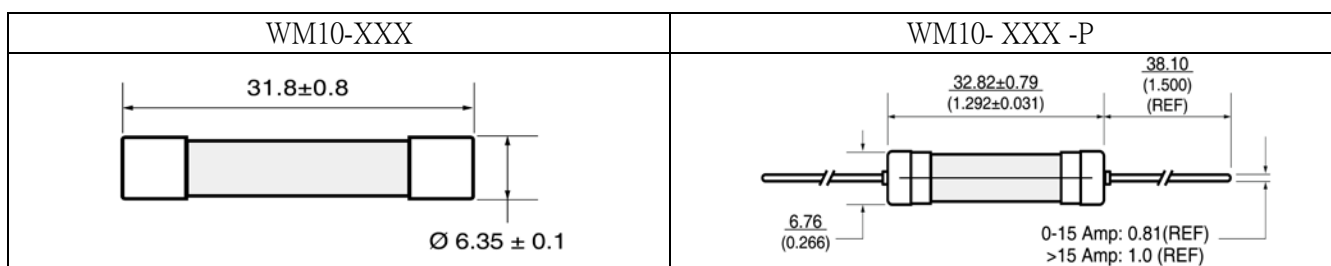
Appearances: There shall not be break up and any remarkable blotch.

5-2 形狀：小型保險絲。

Configuration: Miniature-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)




7. 特性 / ELECTRICAL CHARACTERISTICS

| Electrical Characteristics | | |
|----------------------------|-------------|--------------|
| Rated Current | 1.0In | 2.5In |
| 200mA-12A | 4 hour min. | 120 sec max. |

Specification

| Part No. | | Rated Voltage | | Rated Current | Breaking Capacity (A) | | Typical Cold Resistance (mΩ) | Typical Voltage Drop (mV) | Typical Pre-Arcing I ² t (A ² Sec) |
|-----------|-------------|---------------|------|---------------|-----------------------|------|------------------------------|---------------------------|--|
| | | DC | AC | | DC | AC | | | |
| WM10-0.2 | WM10-0.2-P | 600V | 600V | 200mA | 10kA | 10kA | 1830 | 780 | 0.0031 |
| WM10-0.25 | WM10-0.25-P | | | 250mA | | | 1760 | 760 | 0.009 |
| WM10-0.4 | WM10-0.4-P | | | 400mA | | | 1650 | 700 | 0.059 |
| WM10-0.5 | WM10-0.5-P | | | 500mA | | | 1290 | 650 | 0.081 |
| WM10-0.6 | WM10-0.6-P | | | 600mA | | | 1020 | 600 | 0.178 |
| WM10-1 | WM10-1-P | | | 1A | | | 390 | 560 | 0.21 |
| WM10-1.25 | WM10-1.25-P | | | 1.25A | | | 300 | 550 | 3 |
| WM10-1.6 | WM10-1.6-P | | | 1.6A | | | 180 | 350 | 3.72 |
| WM10-2 | WM10-2-P | | | 2A | | | 110 | 360 | 1.5 |
| WM10-2.5 | WM10-2.5-P | | | 2.5A | | | 80 | 300 | 4.5 |
| WM10-3 | WM10-3-P | | | 3A | | | 60 | 270 | 7.54 |
| WM10-3.15 | WM10-3.15-P | | | 3.15A | | | 50 | 250 | 12.66 |
| WM10-4 | WM10-4-P | | | 4A | | | 40 | 230 | 15.8 |
| WM10-5 | WM10-5-P | | | 5A | | | 30 | 200 | 30 |
| WM10-6 | WM10-6-P | | | 6A | | | 20 | 186 | 84.5 |
| WM10-8 | WM10-8-P | | | 8A | | | 17 | 175 | 75 |
| WM10-10 | WM10-10-P | 10A | 16 | 170 | 97.7 | | | | |
| WM10-12 | WM10-12-P | 12A | 9 | 160 | 149 | | | | |

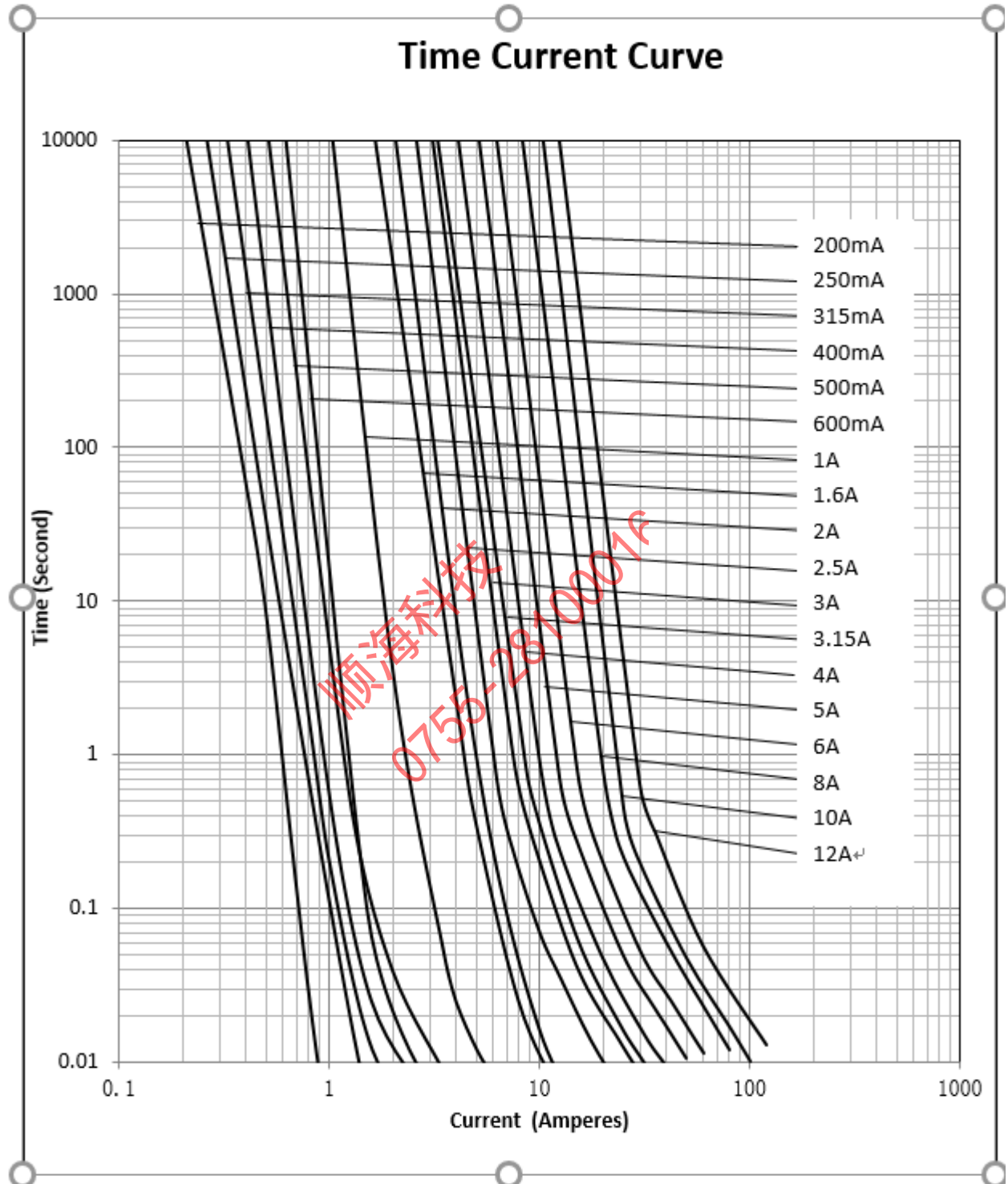
*冷電阻在直流<10%額定電流條件下 25°C環境溫度中測量

DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C

* I²t 值是以 10In 電流測量

Typical Pre-arching I²t are measured at 10In Current

8. 時間電流曲線 Time-Current Curve



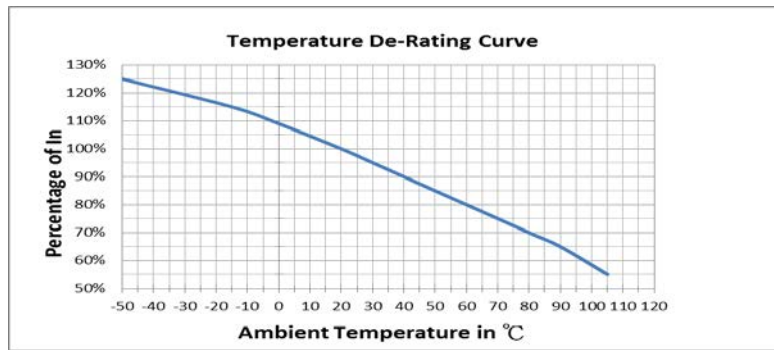
9. 環境特性 / ENVIRONMENTAL CHARACTERISTIC

9-1 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:



9-2 存儲條件 / Storage Conditions

在溫度 $+10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ 、相對濕度 $\leq 75\%$ 的密閉條件下可存放3年。
Under airtight in temperature $+10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ 、relative humidity $\leq 75\%$ can store 3 years.

在溫度 $+10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ 、相對濕度為95%的非露天下最多可存放30天。
Without dew in temperature $+10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ 、relative humidity be 95% maximum value for 30days.

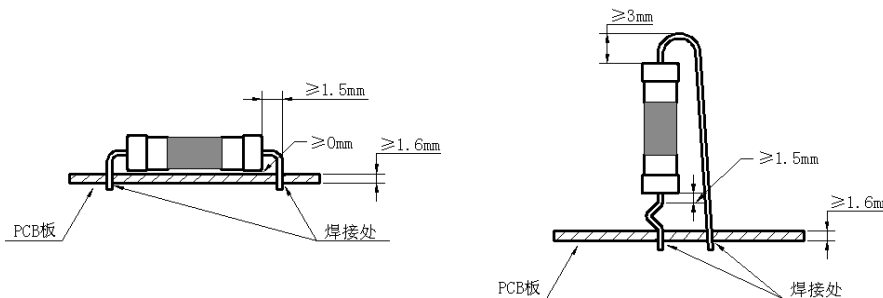
10. 安全認證及編號 / STANDARDS AND APPROVALS

| | |
|-----|------------------------|
| UR | E56092 (1A~12A JDYX2) |
| CUR | E56092 (1A~12A JDYX8) |

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

11-1 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.



11-2 建議客戶焊接參數 / Recommended Customer Soldering Parameters

波峰焊參數 / Wave Parameters:

錫爐溫度 / Solder Pot Temperature: $260\pm 3^{\circ}\text{C}$

焊接時間 / Solder Dwell Time: 10s Max

手工焊參數 / Hand-Solder Parameters:

烙鐵溫度 / Solder Iron Temperature: $350\pm 5^{\circ}\text{C}$

焊接時間 / Heating Time: 5 s Max



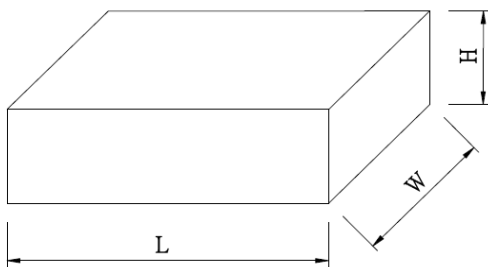
12. 包裝 / PACKING

12-1 數量/Quantity

| 規格 Specs | 袋 Inner polybag | 小盒 Inner small box . | 大盒 Inner big box | 外箱 outer carton |
|--|--------------------|-------------------------|---------------------|--------------------|
| WM10-XXX (rated current <2A) | / | 20PCS | 240PCS | 4320 PCS |
| WM10-XXX (rated current $\geq 2\text{A}$) | 250PCS | / | 250PCS | 5000 PCS |
| WM10-XXX-P | / | / | 75PCS | 2250 PCS |

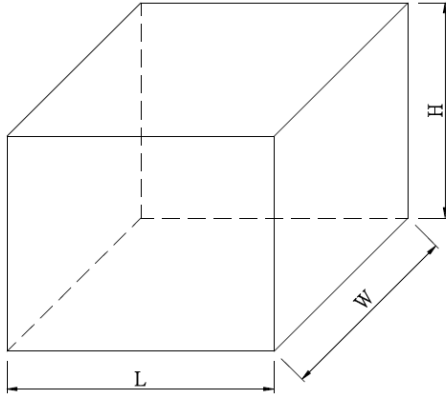
12-2 內盒(大) / Inner big box

單位/Unit : mm



| 規格/ Specs | L | W | H |
|--|------------|------------|-----------|
| WM10-XXX (rated current <2A) | 140 ± 3 | 105 ± 3 | 45 ± 3 |
| WM10-XXX (rated current $\geq 2\text{A}$) | 185 ± 3 | 75 ± 3 | 65 ± 3 |
| WM10-XXX-P | 115 ± 3 | 110 ± 3 | 45 ± 3 |

12-3 外箱 / Outer carton



單位/Unit : mm

| 规格 /Specs | L | W | H |
|------------------------------|--------|-------|-------|
| WM10-XXX (rated current <2A) | 380 ±5 | 245±5 | 200±5 |
| WM10-XXX (rated current ≥2A) | 400±5 | 380±5 | 140±5 |
| WM10-XXX-P | 400±5 | 380±5 | 140±5 |

13. 其他 / OTHERS

13-1 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.

13-2 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.

順海科技
0755-28109916



| 版次 | 製作 | 確認 | 審核 |
|-----|-----|-----|--------|
| 第四版 | 侯愛珍 | 吳讓彬 | Andrew |



UL iQ for Fuses



Fuses

E56092

Guide Information

SUZHOU WALTER ELECTRONIC CO LTD

NO.99 Xinli Road, Fenhu Technic Development Zone, Wujiang Jiangsu 215211 CN

WM10 followed by 0.1 to 50, followed by P

Supplemental fuses: pigtail leads, filled-tube

| <u>Size</u> mm(in) | <u>Amps</u> (A) | <u>Volts</u> (V) | <u>Interrupting</u> <u>Rating (A)</u> |
|---------------------------|--------------------|---------------------|--|
| 6.3 x 31.75 (0.25 x 1.25) | 0.1 - 50 | 250Vac | 1000 |
| | 0.1 - 30 | 660Vac | 1000 |
| | 0.1 - 30 | 660Vdc | 1000 |
| | 0.1 - 12 | 600Vdc | 10000 |
| | 0.1 - 12 | 1000Vdc | 10000 |
| | 0.1 - 50 | 150Vdc | 1000 |
| | 0.1 - 12 | 600Vac | 10000 |
| | 0.1 - 12 | 1000Vac | 10000 |
| | 0.1 - 30 | 400Vac | 1000 |
| | 0.1 - 30 | 400Vdc | 1000 |
| | 0.1 - 12 | 300Vac | 10000 |
| | 0.1 - 12 | 300Vdc | 10000 |

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