

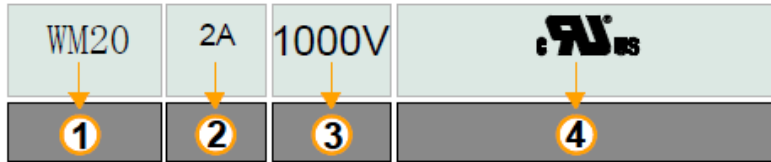


1. 適用範圍 / SCOPE

WM20 系列小型保險絲，適用於數字儀表。  
WM20 series Miniature-Fuse, used in Digital Measuring Instruments

2. 產品型號 / TYPE

例「example」：



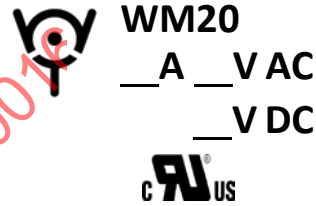
- ① 系列號 / Series Number
- ② 額定電流 / Rated Current
- ③ 額定電壓 / Rated Voltage
- ④ 認證符號 / Approved Symbol

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

額定電流 / Rated Current: 200mA~3A  
額定電壓 / Rated Voltage: 1000V 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.


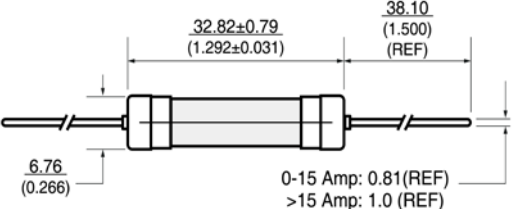
5. 外觀及形狀 / APPEARANCES AND CONFIGURATION

- 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)



WM20-XXX	
WM20-XXX-P	

## 7. 電氣特性 / ELECTRICAL CHARACTERISTICS

Electrical Characteristics		
Rated Current	1.0I <sub>n</sub>	2.5I <sub>n</sub>
200mA - 3A	4 hour min.	120 sec max.

## 說明/Specifications

Specification									
Part No.		Rated Voltage		Rated Current	Breaking Capacity (A)		Typical Cold Resistance (mΩ)	Typical Voltage Drop (mV)	Typical Pre-Arching I <sup>2</sup> t (A <sup>2</sup> Sec)
		DC	AC		DC	AC			
WM20-XXX	WM20-XXX-P	1000V	1000V	200mA	10kA	10kA	3900	850	0.003
WM20-0.2	WM20-0.2-P			250mA			2755	828	0.009
WM20-0.25	WM20-0.25-P			315 mA			1900	568	0.030
WM20-0.4	WM20-0.4-P			400mA			1875	890	0.038
WM20-0.5	WM20-0.5-P			500mA			1160	616	0.041
WM20-0.6	WM20-0.6-P			600mA			1035	765	0.072
WM20-1	WM20-1-P			1A			450	553	0.23
WM20-1.25	WM20-1.25-P			1.25A			300	550	3
WM20-1.6	WM20-1.6-P			1.6A			173	380	0.768
WM20-2	WM20-2-P			2A			155	381	1.28
WM20-2.5	WM20-2.5-P			2.5A			89	275	3.91
WM20-3	WM20-3-P			3A			64	218	7.74

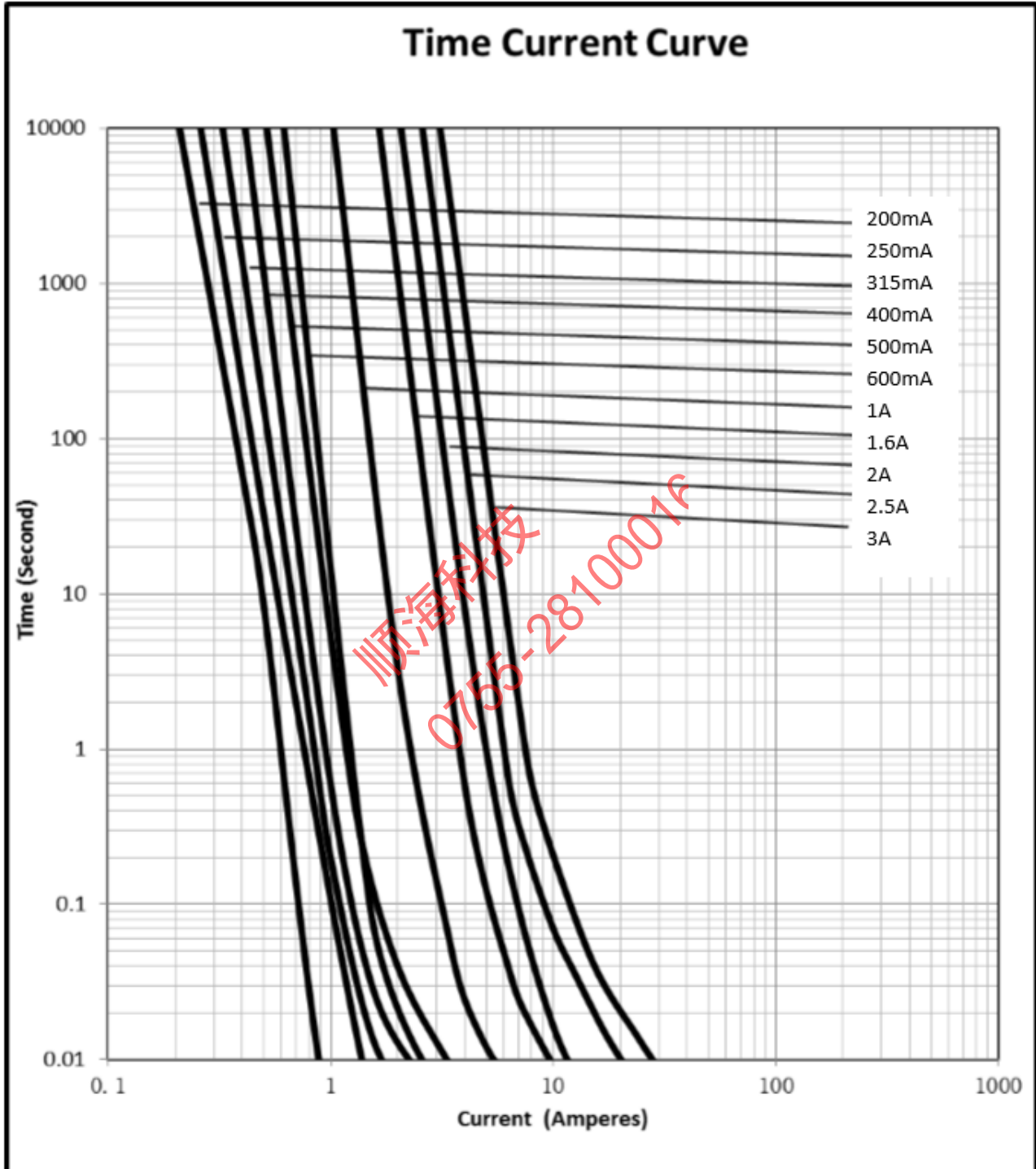
\*冷電阻在直流<10%額定電流條件下 25°C環境溫度中測量

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

\* I<sup>2</sup>t 值是以 10I<sub>n</sub> 電流測量

Typical Pre-arching I<sup>2</sup>t are measured at 10I<sub>n</sub> Current

8. 時間電流曲線 Time-Current Curve

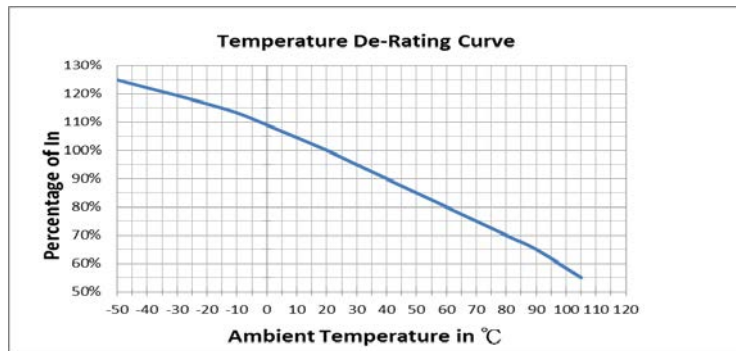


9. 環境特性 / ENVIRONMENTAL CHARACTERISTIC

9-1 操作溫度範圍: -55°C ~ 125°C / Operating Temperature: -55°C ~ 125°C

若貴司操作環境溫度超出25±5°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 20~30°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°C ~ 60°C、相對濕度≤75%的密閉條件下可存放 3 年。  
Under airtight in temperature+10°C ~ 60°C、relative humidity ≤75% can store 3 years.

在溫度+10°C ~ 60°C、相對濕度為 95%的非露天下最多可存放 30 天。  
Without dew in temperature+10°C ~ 60°C、relative humidity be 95% maximum value for 30days.

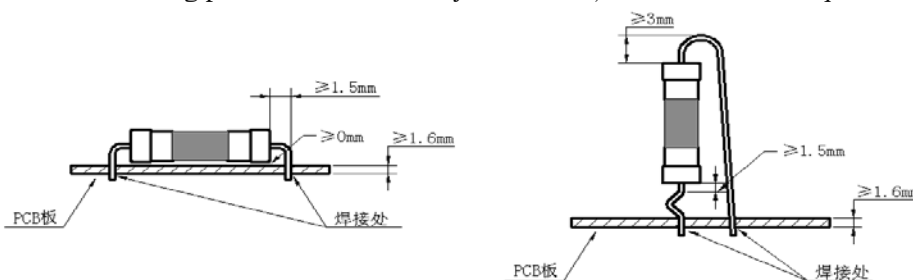
10. 安全認證及編號 / STANDARDS AND APPROVALS

UR	E56092 (200mA~3A JDYX2 )
CUR	E56092 (200mA~3A 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°C Max

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±5°C

焊接時間 / Heating Time: 5 s Max



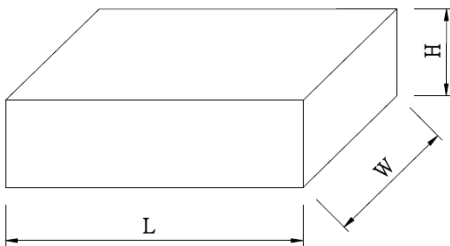
11. 包裝 / PACKING

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
WM20-XXX (rated current <2A)	/	20PCS	240PCS	4320 PCS
WM20-XXX (rated current ≥2A)	250PCS	/	250PCS	5000 PCS
WM20-XXX-P		/	75PCS	2250 PCS

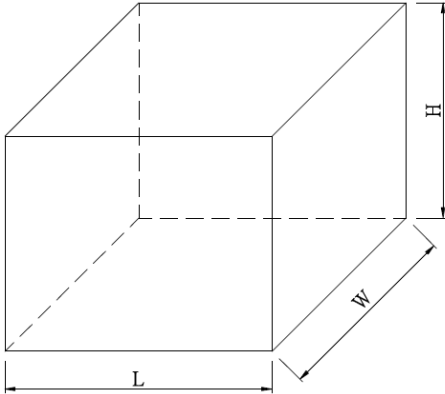
12-2 內盒(大) / Inner big box

單位/Unit : mm



規格/ Specs 規格	L	W	H
WM20-XXX (rated current <2A)	140±3	105±3	45±3
WM20-XXX (rated current ≥2A)	185±3	75±3	65±3
WM20-XXX-P	115±3	110±3	45±3

12-3 外箱 / Outer box of packing



單位/Unit : mm

規格 /Specs	L	W	H
WM20-XXX (rated current <2A)	380 ±5	245±5	200±5
WM20-XXX (rated current ≥ 2A)	400±5	380±5	140±5
WM20-XXX-P	400±5	380±5	140±5

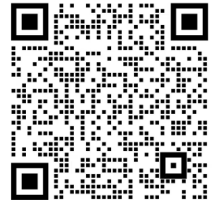
13.其他 / OTHERS

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.



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

#### WM20 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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