

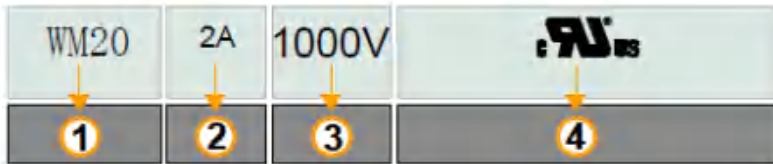


1. 適用範圍 / SCOPE

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

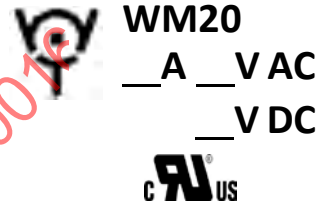
4. 標示 / MARKING

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.




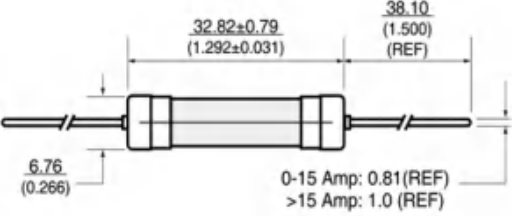
5. 外觀及形狀 / APPEARANCES AND CONFIGURATION

- 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			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	Rated Current	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

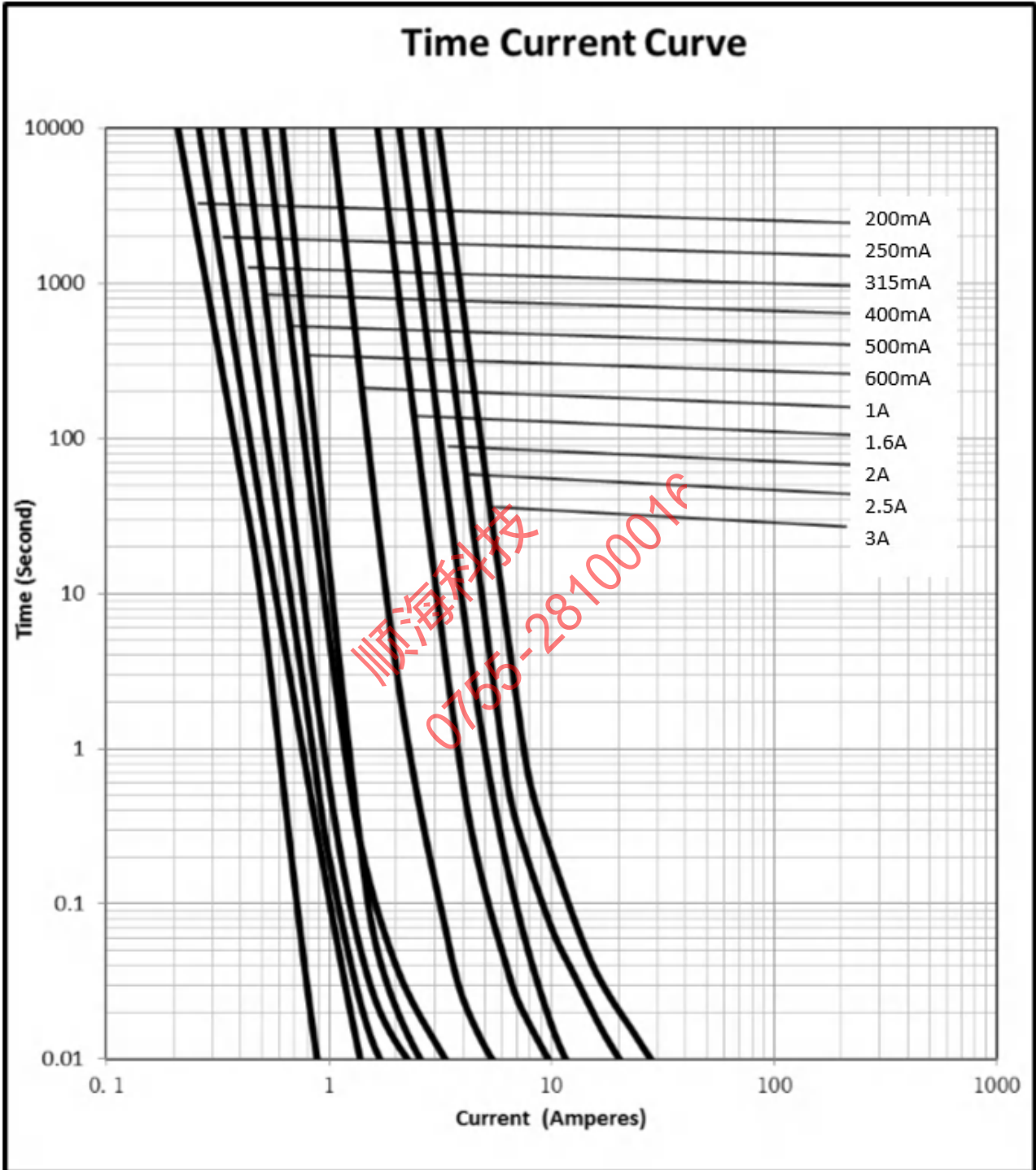
\*冷電阻在直流<10%額定電流條件下 25°C環境溫度中測量

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

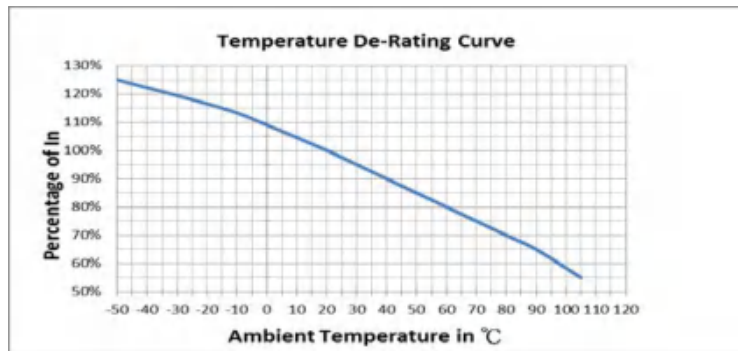


9. 環境特性 / ENVIRONMENTAL CHARACTERISTIC

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.

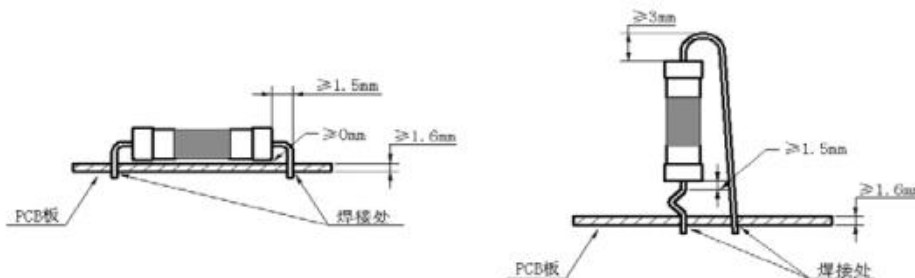
10. 安全認證及編號 / STANDARDS AND APPROVALS

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



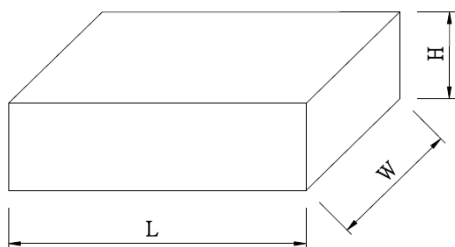
## 11. 包裝 / PACKING

## 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

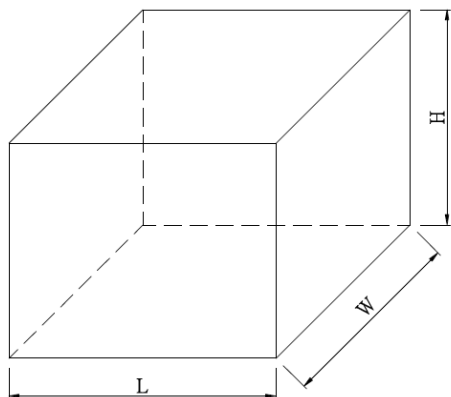
## 12-2 內盒(大) / Inner big box

單位/Unit : mm



规格/ Specs 规格	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.

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

### 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

Report Date: 2016-04-01

Last Revised: 2018-06-14

© 2019 UL LLC



顺海科技  
0755-28100016