

1. 適用範圍 / SCOPE

1032SF 系列快速保險絲，適用於一般電子設備。

1032SF series Fast Acting Fuse, used in electronic equipment.

2. 產品編碼 / Part Numbering

例「example」：

1032SF	20A	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:

20A~60A

額定電壓 / Rated Voltage:

20A~30A: 250Vac 100V dc

40A~60A: 250Vac 72V 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 : S

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。

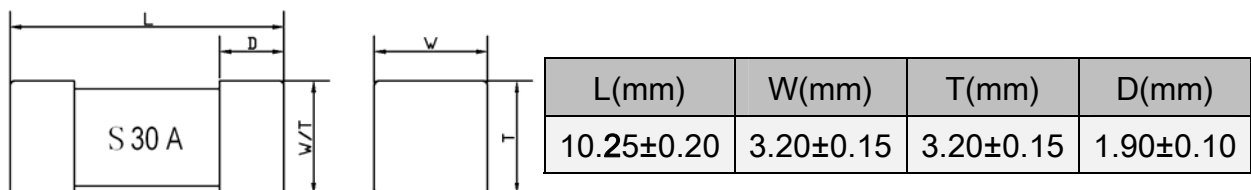
Appearances : There shall not be any remarkable stain, rust or crack on the appearances; marking shall be easily legible.

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 (after opening)	10,000 ohms minimum	MIL-STD-202G, Method 302 Test Condition A
2	可焊性 Solderability	T=215°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	5 cycles between -65°C/+125°C 15minutes ; each extreme ΔR :<10%	MIL-STD-202G, Method 107 Test Condition B
5	機械衝擊 Mechanical Shock	100Gs Peak amplitude , sawtooth wave 6 ms duration , 3 cycles XYZ+xyz=18 shocks. ΔR :<10%	MIL-STD-202G, Method 213 Test Condition 1
6	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
7	抗潮濕性 Moisture Resistance	85°C±3°C, 80%~90%RH 10 cycles ΔR :<10%	MIL-STD-202, Method 106
8	振動 Vibration	10-55-10 Hz Sweep in 1 minure , 0.03 in.amplitude . 2hours in each of XYZ planes=6hours total. ΔR : <10%	MIL-STD-202 Method 201 (10-55Hz)
9	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)

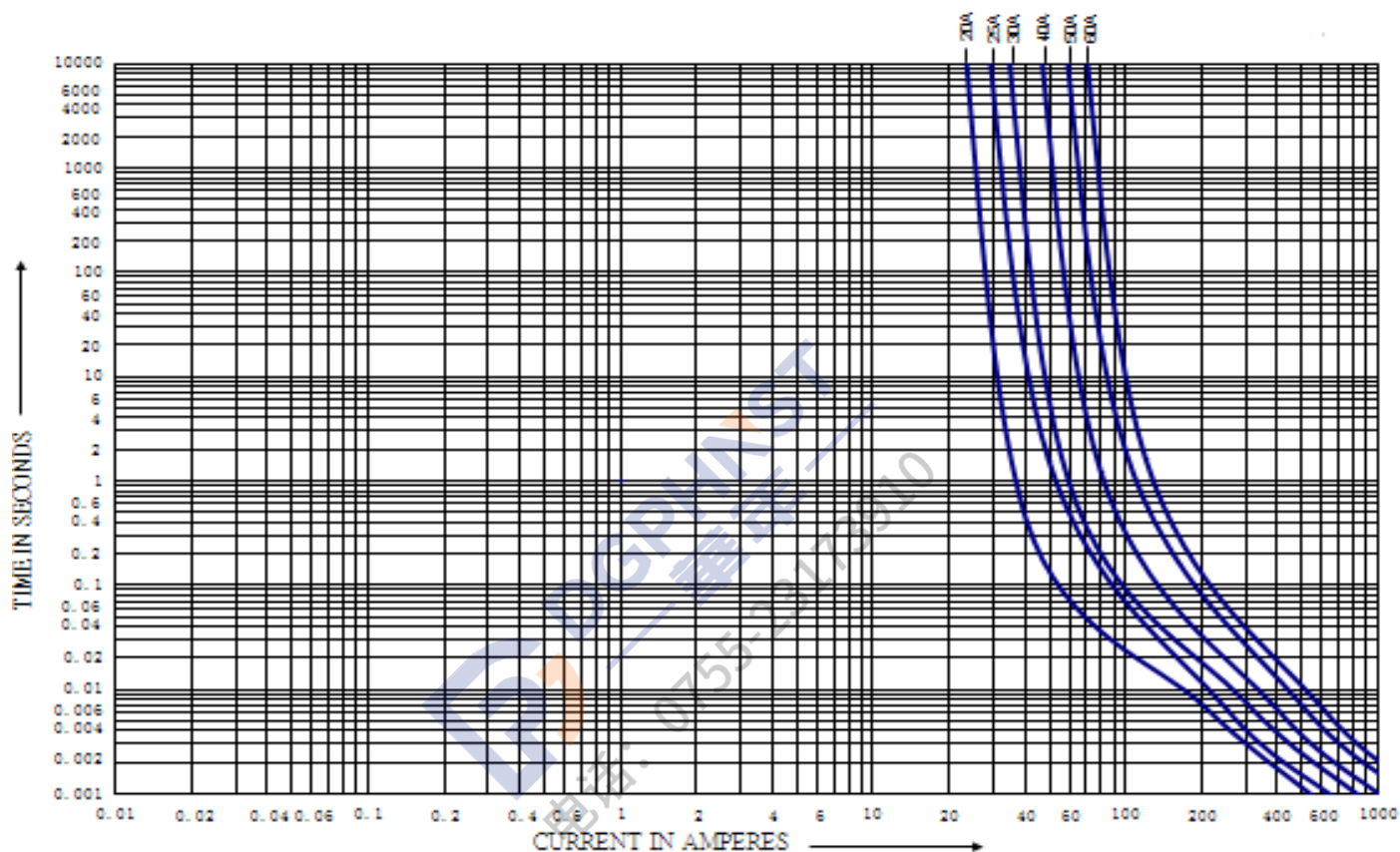
RATED CURRENT	1 In	2In	10In
20A~60A	4hrs Min.	60s Max.	>1ms

8-2 產品規格/Specification

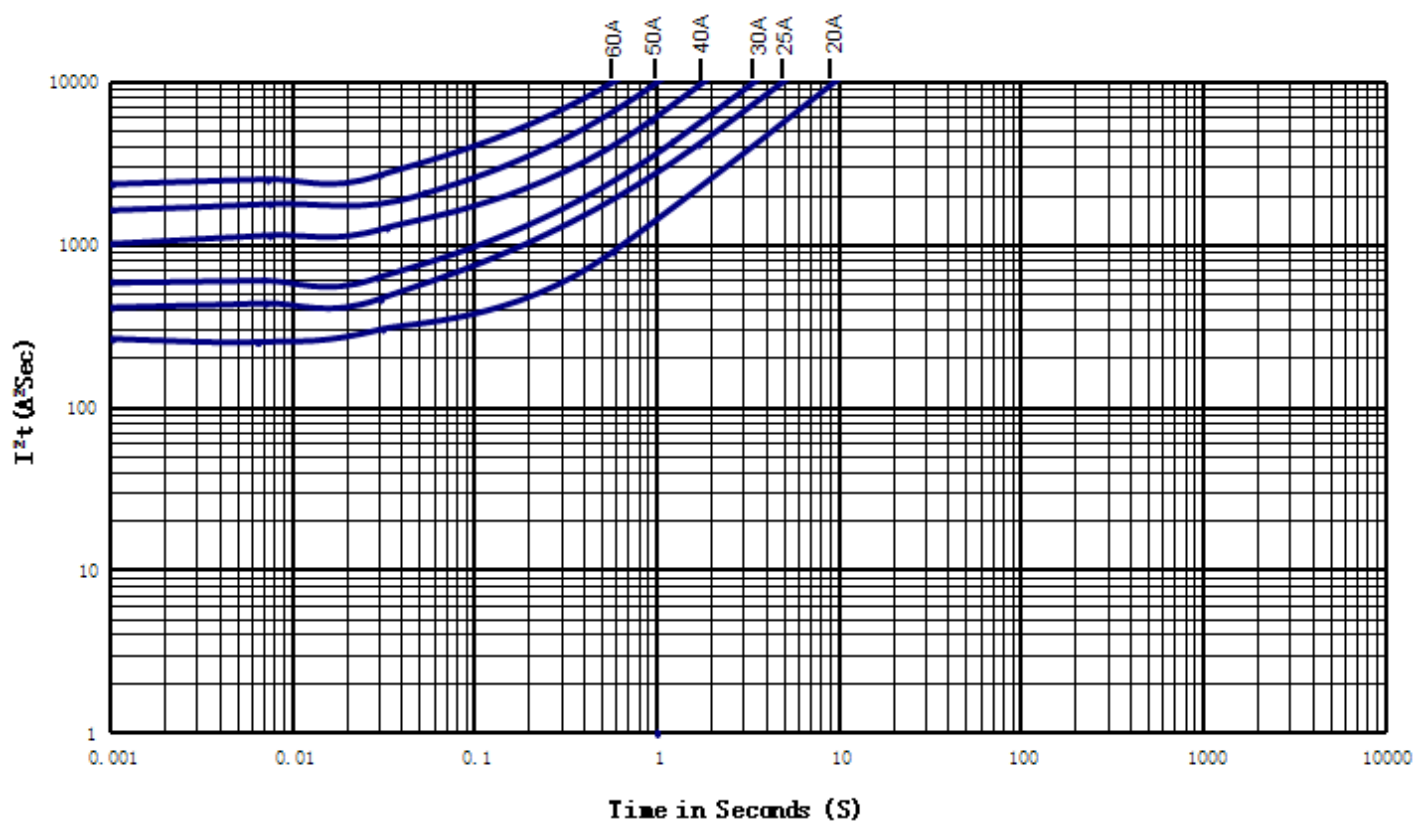
額定電流 Rated Current	額定電壓 Rated Voltage	分斷能力 Breaking Capacity	Typical Cold DCR (mΩ)	Normal I ² T** (A ² sec)
20A	250Vac / 100V dc	100A@ 250V AC 300A@ 65V AC 300A@ 100V DC 500A@ 72V DC 1000A@ 32V DC	3.08	264
25A	250Vac / 100V dc		2.15	413
30A	250Vac / 100V dc		2.08	594
40A	250Vac / 72V dc		1.23	1024
50A	250Vac / 72V dc	100A@ 250V AC 300A@ 65V AC 180A@ 72V DC 600A@ 60V DC	1.00	1650
60A	250Vac / 72V dc		0.88	2376

** I²T Values stated for 10 msec coping time

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



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



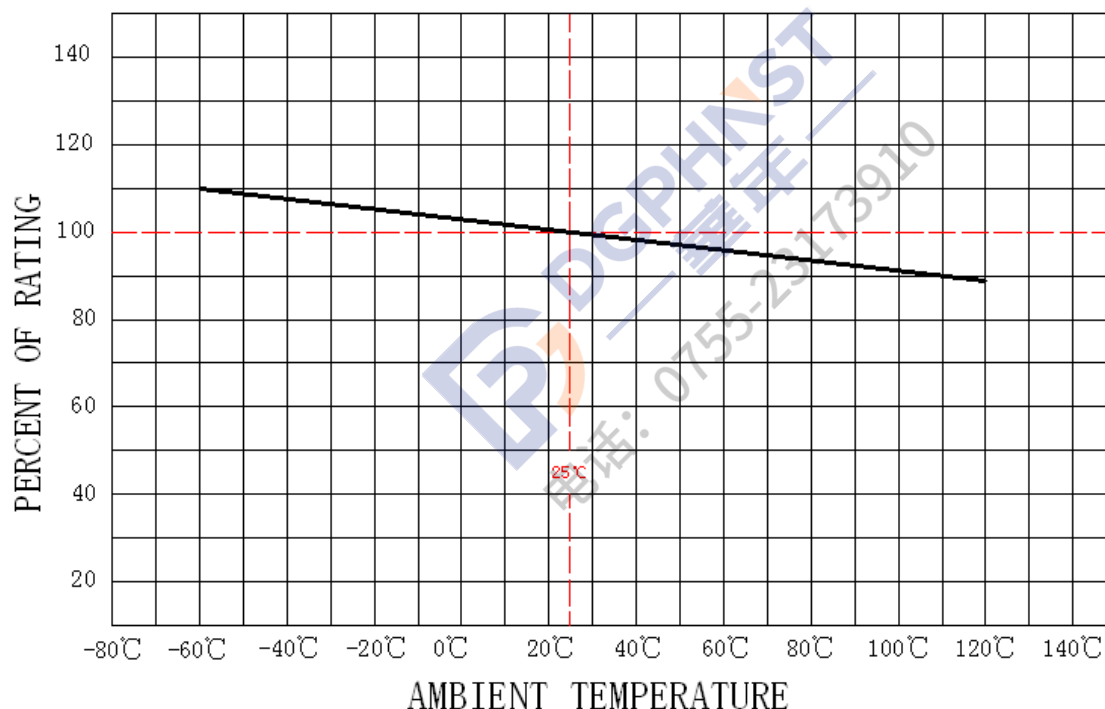
9.環境特性 / ENVIRONMENTAL CHARACTERISTIC

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 $+5^{\circ}\text{C} \sim 30^{\circ}\text{C}$ 、相對濕度 25%~60%的密閉條件下可存放 2 年。

Under airtight in temperature $+5^{\circ}\text{C} \sim 30^{\circ}\text{C}$ 、relative humidity 25%~60% can store 2 years.

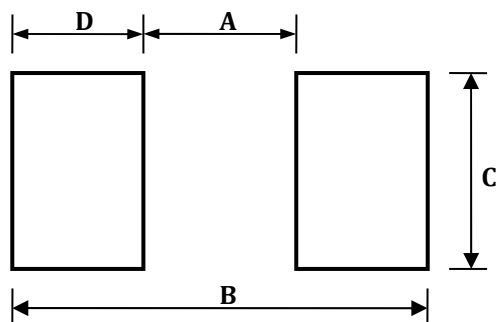
在溫度 $+10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ 、相對濕度為 95%的非露天下最多可存放 30 天。

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)
1032SF	5.72±0.30	12.6±0.30	3.43±0.30	3.25±0.30

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

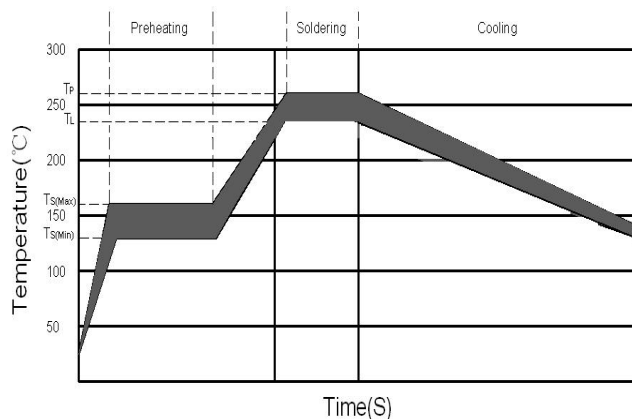
1. Infrared Reflow:

Temperature : 260℃

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℃

Time in Reservoir : 10sec Max.

3. Hand Soldering :

Temperature : 350℃

Time : 3sec 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檔的要求。

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

12.安全認證及編號 / STANDARDS AND APPROVALS

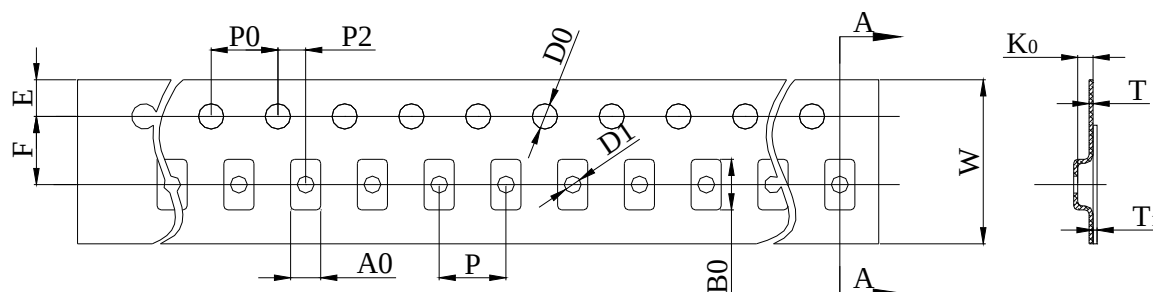
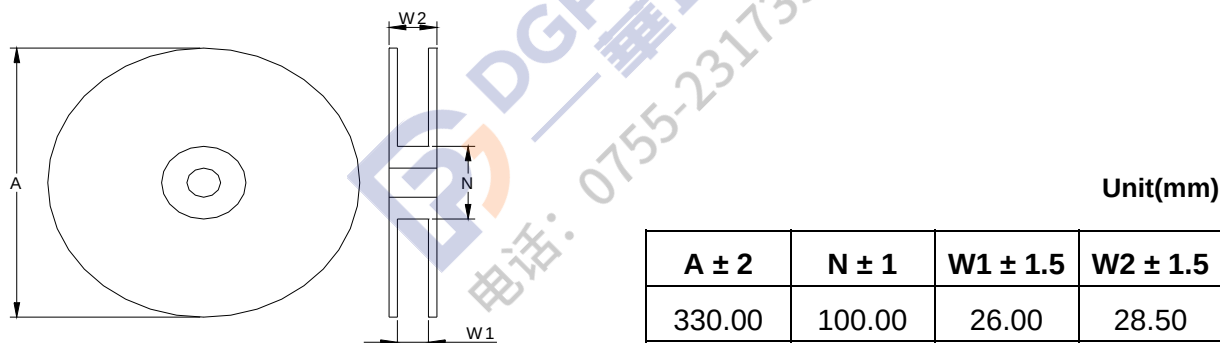
UL	E56092
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13.包裝訊息 / PACKING INFORMATION

13-1包裝數量、重量 / QUANTITY & WEIGHT

型號 Type Number	數量(pcs) Quantity(pcs)
1032SF	2,000

13-2 捲輪規格/ Reel & Tape specifications

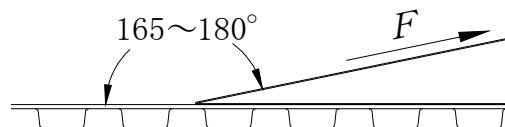


Unit(mm)

W	24.00 ± 0.30	D0	1.50 ± 0.10
P0	4.00 ± 0.10	F	11.50 ± 0.10
P	8.00 ± 0.10	E	1.75 ± 0.10
P2	2.00 ± 0.10	T	0.35 ± 0.05
A0	1.50 ± 0.10	T1	Max. 0.1
B0	10.30 ± 0.10	K0	3.50 ± 0.10

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

$F = \text{剝離強度} : 0.1 - 1.0\text{N} (10 - 100\text{gf})$



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
第四版	饒紅	蔡明威	<i>Russel</i> 2019/7/26



UL iQ for Fuses



Fuses

E56092

Guide Information

SUZHOU WALTER ELECTRONIC CO LTD

Fenhu Technic Development Zone, Wujiang Jiangsu 215211 CN

1032SF, 1032SS

Supplemental fuses: surface mount, cartridge enclosed

<u>Size</u> <u>mm(in)</u>	<u>Amps</u> <u>(A)</u>	<u>Volts</u> <u>(V)</u>	<u>Interrupting</u> <u>Rating (A)</u>
10.3 x 3.2 x 3.2 (0.41 x 0.13 x 0.13)	20 - 60	250Vac	100
	20 - 60	65Vac	300
	40 - 60	72Vdc	180
	40 - 60	60Vdc	600
	20 - 30	100Vdc	300
	20 - 30	72Vdc	500
	20 - 30	32Vdc	1000

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