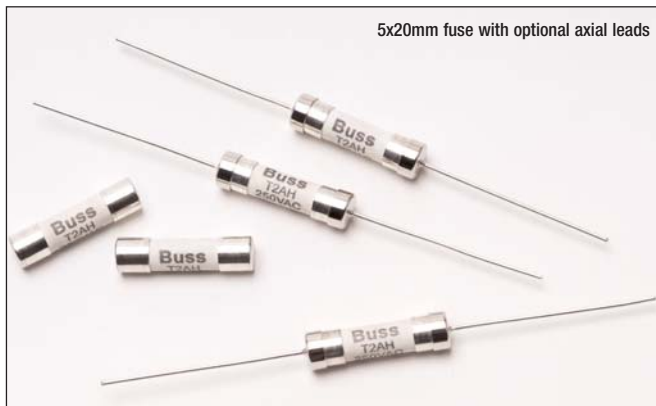


## 400Vdc/500-600Vac Time-Delay 5x20mm Fuses S505H Series



### Description

400Vdc/500-600Vac Time-delay 5x20mm ceramic tube fuses with electroplated end caps. The S505H Series provides higher voltage ratings and breaking capacities than standard IEC 60127-2 fuses.

### Features

- Time-delay, high breaking capacity
- 5 x 20mm physical size
- Ceramic tube with plated end cap construction
- Designed to IEC 60127-2, Standard, Sheet 5
- RoHS Compliant, lead free and halogen free
- Optional axial leads available

### Specifications

| Catalog Number | Voltage Rating Vac | Max. Voltage Rating <sup>1</sup> |     | Interrupting Rating (A) <sup>2</sup> Under |           |         | Typical DC Cold Resistance Ω <sup>3</sup> | Typical Voltage Drop (mV) <sup>4</sup> | Typical Value I <sup>2</sup> t (A <sup>2</sup> s) <sup>5</sup> | Agency Approvals |                  |                  |         |                    |   |
|----------------|--------------------|----------------------------------|-----|--|-----------|---------|---|--|--|------------------|------------------|------------------|---------|--------------------|---|
|                |                    | AC                               | DC  | 250 Vac                                    | Max Volts | 400 Vdc |   |  |  | 250Vac           |                  |                  |         |                    |   |
|                |                    |                                  |     |  |           |         |   |  |  | TUV <sup>6</sup> | CQC <sup>6</sup> | CCC <sup>6</sup> | PSE/JET | cURus <sup>7</sup> |   |
| S505H-500-R    | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.507                                     | 295                                    | 0.188  |                  |                  |                  |         |                    | x |
| S505H-800-R    | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.237                                     | 189                                    | 0.632  |                  |                  |                  |         |                    | x |
| S505H-1-R      | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.14                                      | 153                                    | 1.28   |                  |                  |                  | X       |                    | x |
| S505H-1.25-R   | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.108                                     | 150                                    | 2.22   |                  |                  |                  | X       |                    | x |
| S505H-1.6-R    | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.07                                      | 125                                    | 6.78   |                  |                  |                  | X       |                    | x |
| S505H-2-R      | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.055                                     | 128                                    | 11.44  | X                |                  | X                | X       |                    | x |
| S505H-2.5-R    | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.04                                      | 126                                    | 24.23  | X                |                  | X                | X       |                    | x |
| S505H-3.15-R   | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.031                                     | 121                                    | 43.55  | X                |                  | X                | X       |                    | x |
| S505H-4-R      | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.019                                     | 90                                     | 38.45  | X                |                  | X                | X       |                    | x |
| S505H-5-R      | 250                | 600                              | 400 | 1500                                       | 100       | 1500    | 0.015                                     | 89                                     | 71.3   | X                |                  | X                | X       |                    | x |
| S505H-6.3-R    | 250                | 500                              | 400 | 1500                                       | 100       | 1500    | 0.011                                     | 80                                     | 111.4  | X                |                  | X                | X       |                    | x |
| S505H-8-R      | 250                | 500                              | 400 | 1500                                       | 100       | 1500    | 0.007                                     | 76                                     | 228.2  | X                | X                |                  | X       |                    | x |
| S505H-10-R     | 250                | 500                              | 400 | 1500                                       | 100       | 1500    | 0.006                                     | 72                                     | 349.5  | X                | X                |                  | X       |                    | x |

1. Max. Voltage rating: Base on the breaking capacity test according to UL.  
 2. - Breaking Capacity of 250VAC/1500A is tested by all agency approvals, test condition is 250Vac, PF: 0.7-0.8.  
 - Breaking Capacity of Max. voltage is tested by UL, PF:1.  
 - Breaking Capacity Test of DC is tested by UL under Capacitor Bank 4800mF (for 400V, 1500A), 2400mF (for 400V, 500A).

### Applications

- Power supplies - adapters
- Desktops/notebooks
- TVs / Displays
- Set top boxes
- Lighting ballasts
- Battery chargers
- Printers B-SS 5MM fuse 2007-02
- Game systems
- Air conditioners

### Agency Information

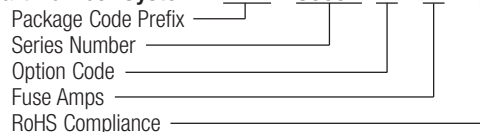
#### S505H-XXX-R (Ferrule)

- cURus approval: Guide JFHR2, File E56412 and Guide JFHR8, File E56412
- CCC: 2A-4A, Cert. No.: 2010010207395946; 5A-6.3A Cert. No.: 2010010207390567
- CQC Approval: 8A-10A, Cert. No.: CQC10012043350
- TUV Approval: 2A-10A, Cert. No.: R50172128
- PSE Approval: 1A-5A, Cert. No.: JET1641-31003-1009; 6.3A-10A, Cert. No.: JET1641-31003-1011,

#### S505H-V-XXX-R (Axial Leads)

- PSE Approval: 1A-5A, Cert. No.: JET1641-31003-1010; 6.3A-10A, Cert. No.: JET1641-31003-1012
- cURus approval: Guide JFHR2, File E56412 and Guide JFHR8, File E56412

### Part Number System: TR2- S505H -V -2 -R

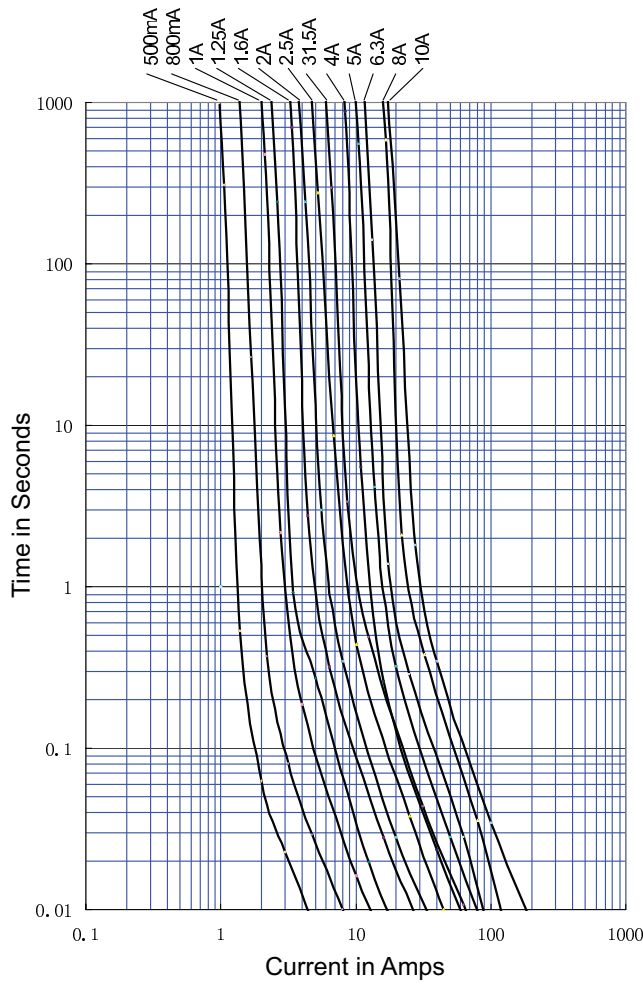


### Ordering

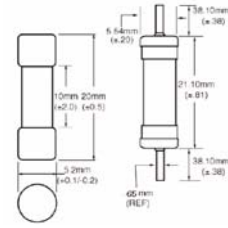
Specify product by package code prefix and option code.

| Electrical Characteristics |                   |                   |                    |       |                 |       |                  |        |
|----------------------------|-------------------|-------------------|--------------------|-------|-----------------|-------|------------------|--------|
| Amps                       | 1.5I <sub>n</sub> | 2.1I <sub>n</sub> | 2.75I <sub>n</sub> |       | 4I <sub>n</sub> |       | 10I <sub>n</sub> |        |
|                            | Min min.          | Max min.          | Min ms             | Max s | Min ms          | Max s | Min ms           | Max ms |
| <1A                        | >60               | <30               | >250               | <80   | >50             | <5    | >5               | <150   |
| 1A-3.15A                   | >60               | <30               | >750               | <80   | >95             | <5    | >10              | <150   |
| 4A-6.3A                    | >60               | <30               | >750               | <80   | >150            | <5    | >10              | <150   |
| 8A-10A                     | >30               | <30               | >750               | <80   | >150            | <5    | >10              | <150   |

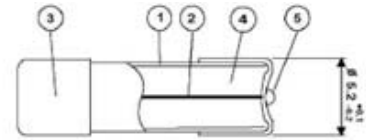
**Time-Current Curves**



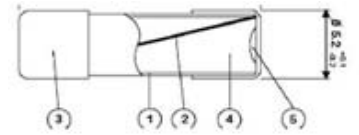
**Dimensions - mm**



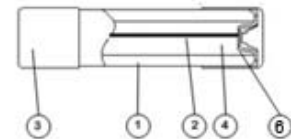
**Construction**



**500-800mA**

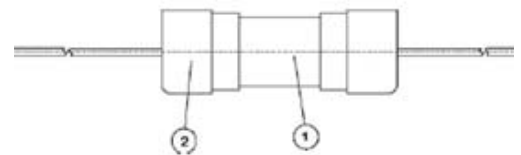


**1-1.6 Amps**



**2 Amps & Above**

- 1. Ceramic Tube
- 2. Wire Fuse Element
- 3. Plated Fuse Cap
- 4. Filler
- 5. Solder
- 6. Eyelet

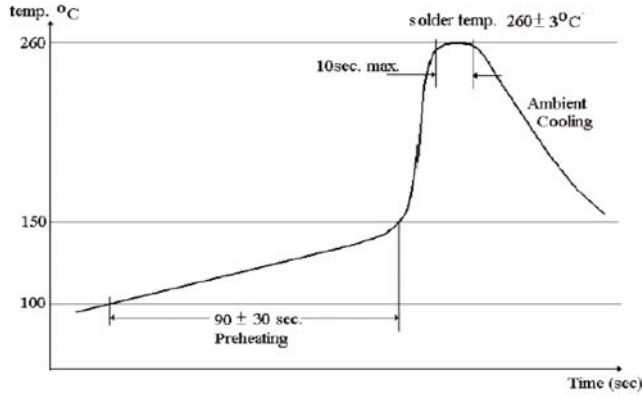


**Axial Leaded Versions**

- 1. S505H-XXX-R
- 2. Axial Leaded Cap

### Wave Soldering Parameters

Note: These devices are NOT recommended for IR or convection reflow processes.



- Reservoir Temperature: 260°C ± 3°C
- Soldering Time: 10 seconds max.

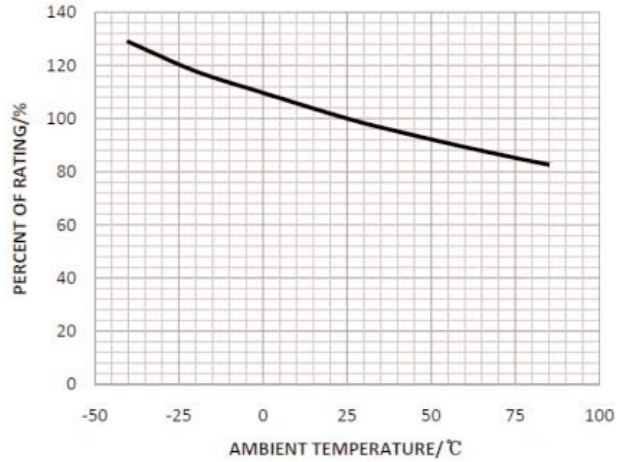
### Recommended Hand Solder Parameters

- Soldering Iron Tip Temperature: 350°C ± 5°C
- Heating Time: 5 seconds max.

### Operating Temperature Range

- -40°C to +85°C (see temperature derating curve below for percentage of fuse rating per ambient temperature)

### Temperature Derating Curve



### Packaging Code

| Packaging Code Prefix | Description  |
|-----------------------|--|
| BK-                   | 100 fuses packed into a cardboard carton with flaps folded |
| BK1-                  | 1000 fuses packed into a poly bag                          |
| TR2-                  | 1500 axial leaded fuses on tape and reel                   |

### Option Code

| Option Code | Description  |
|-------------|--|
| -V          | Axial leads – copper tinned wire with nickel plated brass end caps |
| -R          | RoHS compliant version   |

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