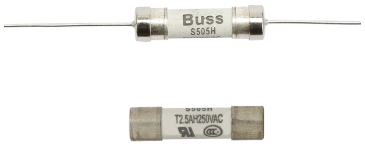
S505H

5 mm x 20 mm 400 Vdc/500-600 Vac time-delay fuses



Applications

- Power supplies - adapters
- Desktops/notebooks
- TVs / Displays
- Set top boxes
- Lighting ballasts
- Battery chargers
- Printers
- Game systems
- Air conditioners

Product features

- 400 Vdc/500-600 Vac rating
- Time-delay, high breaking capacity
- 5 mm x 20 mm 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

Electrical Characteristics								
	$1.5I_n$	$2.1I_n$	$2.75I_n$		$4I_n$		$10I_n$	
Amps	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

Agency information

S505H-XXX-R (Ferrule)

- cURus approval: Guide JFHR2, File E56412 and Guide JFHR8, File E56412 (500 mA - 10 A)
- CCC Approval: 500 mA - 10 A, Cert. No.: 2010010207395946
- TUV Approval: 2 A - 10 A, Cert. No.: R50297821
- PSE Approval: 1 A - 5 A, Cert. No.: JET1641-31003-1017
  6.3 A - 10 A, Cert. No: JET1641-31003-2001

S505H-V-XXX-R (Axial Leads)

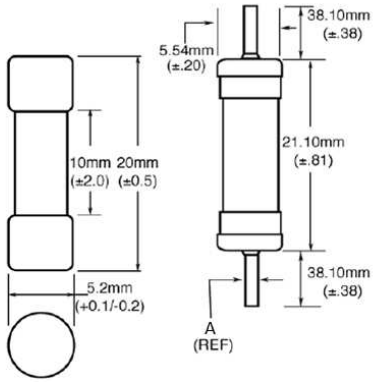
- PSE Approval: 1 A - 5 A, Cert. No.: JET1641-31003-1018; 6.3 A - 10 A, Cert. No: JET1641-31003-2002
- cURus approval: Guide JFHR2, File E56412 and Guide JFHR8, File E56412 (500 mA - 10 A)
- CCC Approval: 500 mA - 10 A, Cert. No.: 2010010207395946

Specifications

Catalog number	Voltage rating Vac	Max. voltage rating AC	Max. voltage rating DC	Interrupting rating (A) under max voltage 250 Vac	Interrupting rating (A) under max voltage Max Volts	Interrupting rating (A) under max voltage 400 Vdc	Typical DC cold resistance Ω[3]	Typical voltage drop (mV)[4]	Typical value I^2t (A^2s)[5]	Agency approvals 250 Vac TUV[6]		CCC[6]	PSE/JET	cURus[7]
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
S505H-10-R	250	500	400	1500	100	1500	0.006	72	349.5	X			X	x

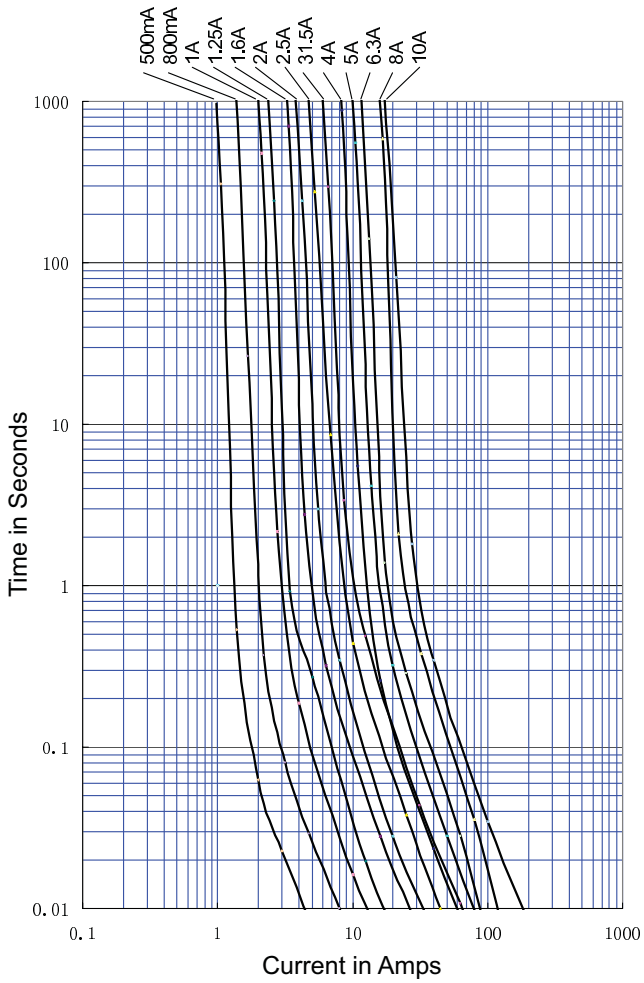
1. Max. voltage rating: Base on the breaking capacity test according to UL.
2. - Breaking capacity of 250 VAC/1500 A is tested by all agency approvals, test condition is 250 Vac, PF: 0.7-0.8.
   - Breaking capacity of Max. voltage is tested by UL, PF:1. (500 mA -5 A @ 600Vac, 6.3 A- 10 A @ 500 Vac)
   - Breaking capacity test of DC is tested by UL under Capacitor Bank 4800 mF (for 400 V, 1500 A), 2400 mF (for 400 V, 500 A).
3. Cold resistance: measure at <10% rated current.
4. Typical voltage drop: voltage drop is measured under ambient +20 °C with rated current
5. Typical pre-arc I^2t: Measured at 10In DC
6. Does not apply to axial leaded versions.
7. 600/500 Vac, 400 Vdc.

Dimensions - mm

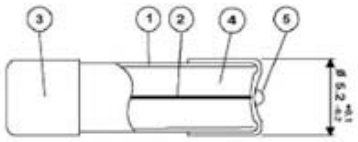


A (ref): 0.65 mm (0.5 A - 6.3 A), 0.80 mm (8 A-10 A)

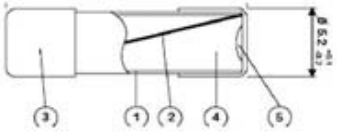
Time-Current Curves



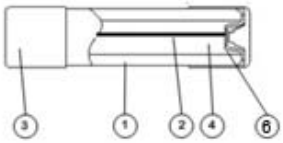
Construction



500-800mA

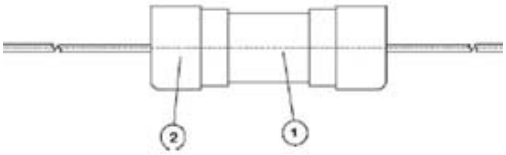


1-1.6 Amps



2 Amps & Above

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

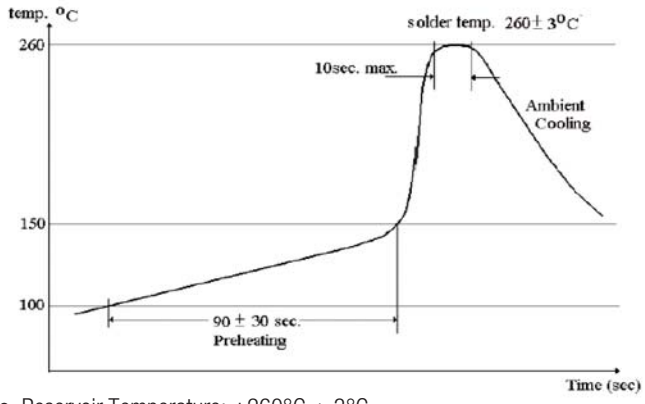


Axial Leaded Versions

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

Wave Soldering Parameters (axial lead only)

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



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

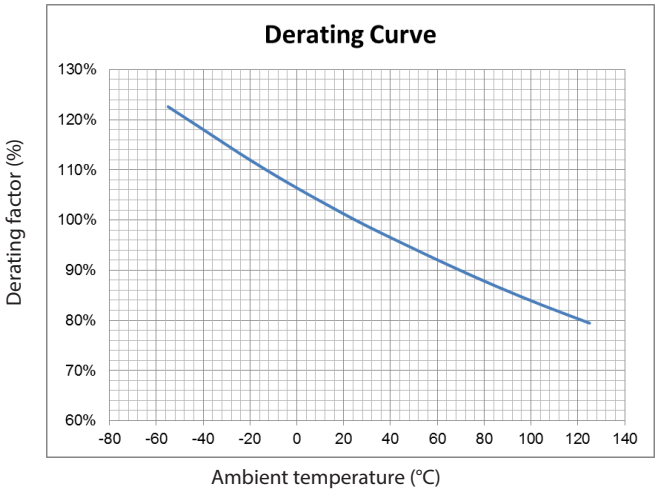
Recommended Hand Solder Parameters

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

Operating Temperature Range

- -55 °C to +125 °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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