

# 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								
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

### 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		Interrupting rating (A) under max voltage			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				
				250 Vac	Max Volts	400 Vdc				250 Vac				
		AC	DC							TUV	CCC <sup>6</sup>	PSE/JET	cURus <sup>2</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	x
S505H-2.5-R	250	600	400	1500	100	1500	0.04	126	24.23	X	X	X	X	x
S505H-3.15-R	250	600	400	1500	100	1500	0.031	121	43.55	X	X	X	X	x
S505H-4-R	250	600	400	1500	100	1500	0.019	90	38.45	X	X	X	X	x
S505H-5-R	250	600	400	1500	100	1500	0.015	89	71.3	X	X	X	X	x
S505H-6.3-R	250	500	400	1500	100	1500	0.011	80	111.4	X	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<sup>2</sup>t: Measured at 10I<sub>n</sub> DC  
 6. Does not apply to axial leaded versions.  
 7. 600/500 Vac, 400 Vdc.



Powering Business Worldwide

**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**

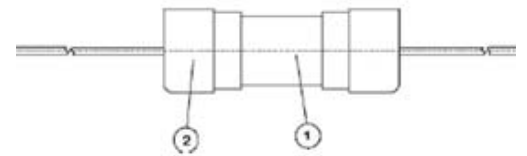


**1-1.6 Amps**



**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

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

**Eaton**  
**Electronics Division**  
 1000 Eaton Boulevard  
 Cleveland, OH 44122  
 United States  
 Eaton.com/electronics

© 2019 Eaton  
 All Rights Reserved  
 Printed in USA  
 Publication No. 4406 PCN19017M  
 December 2019

Eaton is a registered trademark.  
 All other trademarks are property of their respective owners.

Follow us on social media to get the latest product and support information.





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.