

S505

5 mm x 20 mm, Ferrule time-delay, ceramic tube fuses



Product features

- Time-delay high breaking capacity
- Designed to IEC 60127-2
- 0.5 A to 12 A current ratings
- Ceramic tube, nickel plated brass end cap construction
- Halogen free, RoHS compliant, lead free
- Reference [S505SC data sheet \(10132\)](#) for available axial lead options

Applications

Primary circuit protection:

- LED and general lighting
- LED/LCD televisions
- Appliances and white goods
- Printers and peripherals
- Test equipment
- Power supplies

Agency information

- cURus Recognition file number: E19180, Guide JDYX2/JDYX8
- CSA file: 53787
- SEMKO file: 816547, 1119019
- VDE file: 40014091, 40024352, 40023140
- BSI file: KM55676
- IMQ file: CA03 00100, CA03 00529
- PSE: JET 1641-31003-1009, 1641-31003-1010, 1641-31003-1011, 1641-31003-1012, 1641-31003-2001, 1641-31003-2002
- CCC file: 2002010207011295
- KC-Mark file: SU5011-4012A, SU5011-5004A

Ordering

- Use ordering code (see page 4 for details)

Packaging prefixes

- BK- (100 parts in a cardboard carton)
- BK1- (1,000 parts in a bag)

Electrical characteristics

| I_n | 1.5I _n min minute | 2.1I _n max minute | 2.75I _n min ms | max s | 4I _n min ms | max s | 10I _n min ms | max ms |
|--------------|------------------------------------|------------------------------------|---------------------------------|----------|------------------------------|----------|-------------------------------|-----------|
| < 1 A | 60 | 30 | 250 | 80 | 50 | 5 | 5 | 150 |
| 1 A - 3.15 A | 60 | 30 | 750 | 80 | 95 | 5 | 10 | 150 |
| 4 A - 6.3 A | 60 | 30 | 750 | 80 | 150 | 5 | 10 | 150 |
| 8 A - 12 A | 30 | 30 | 750 | 80 | 150 | 5 | 10 | 150 |

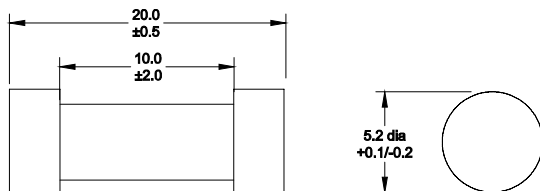
Product specifications

| Part number ⁵ | Current rating (A) | Voltage rating AC | Interrupting rating at rated AC voltage ¹ (50 Hz) (A _{AC}) | Typical DC cold resistance ² (Ω) | Typical pre-arcing ³ I ² t (A ² s) | Typical voltage drop ⁴ (mV) | IMQ | VDE | SEMKO | cURus | CCC | PSE-JET | CSA | KC | BSI |
|--------------------------|--------------------|-------------------|---|---|---|--|-----|-----|-------|-------|-----|---------|-----|----|-----|
| S505-500-R | 0.5 | 250 | 1500 | 0.5070 | 0.188* | 295 | X | X | X | X | X | | X | | X |
| S505-800-R | 0.8 | 250 | 1500 | 0.2370 | 0.632* | 189 | X | X | X | X | X | | X | | X |
| S505-1-R | 1.0 | 250 | 1500 | 0.1570 | 1.28 | 176 | X | X | X | X | X | X | X | X | X |
| S505-1.25-R | 1.25 | 250 | 1500 | 0.1075 | 2.22 | 150 | X | X | X | X | X | X | X | X | X |
| S505-1.6-R | 1.6 | 250 | 1500 | 0.0700 | 6.78 | 125 | X | X | X | X | X | X | X | X | X |
| S505-2-R | 2.0 | 250 | 1500 | 0.0545 | 9.6 | 118.5 | X | X | X | X | X | X | X | X | X |
| S505-2.5-R | 2.5 | 250 | 1500 | 0.0395 | 16.6 | 115 | X | X | X | X | X | X | X | X | X |
| S505-3.15-R | 3.15 | 250 | 1500 | 0.0305 | 36.6 | 102.5 | X | X | X | X | X | X | X | X | X |
| S505-4-R | 4.0 | 250 | 1500 | 0.0185 | 38.45* | 86.5 | X | X | X | X | X | X | X | X | X |
| S505-5-R | 5.0 | 250 | 1500 | 0.0131 | 71.30* | 77.5 | X | X | X | X | X | X | X | X | X |
| S505-6.3-R | 6.3 | 250 | 1500 | 0.0102 | 111* | 75 | X | X | X | X | X | X | X | X | X |
| S505-8-R | 8.0 | 250 | 1500 | 0.0077 | 228* | 73 | X | X | X | X | X | X | X | X | X |
| S505-10-R | 10 | 250 | 1500 | 0.0061 | 397 | 72 | X | X | X | X | X | X | X | X | X |
| S505-12-R | 12 | 250 | 1000 | 0.0053 | 713.7* | 77 | | X | | X | | | | | |

- 1 Interrupting ratings 500 mA to 10 A measured at 70% to 80% PF on AC. 12 A measured at 100% PF on AC.
- 2 Typical DC cold resistance measured at <10% of rated current at an ambient temperature of +20 ° C (reference only)
- 3 Typical pre-arcing (I²t) measured at listed interrupting rating and voltage.
* = measured at 10 times rated current under DC.

- 4 Typical voltage drop measured at +20 ° C at rated current.
- 5 Part number definition: S505-xxx-R
S505= Product code and size
xxx= Ampere rating
-R= Rohs compliant

Dimensions (mm)



Temperature derating curve



Time vs. current curve



Environmental data

Operating temperature: - 55 °C to +125 °C (with derating)

Ordering codes

The ordering code is the part number replacing the “ ” with a “-” plus adding the packaging suffix.

Packaging prefixes

- BK- (100 parts in a cardboard carton)
- BK1- (1,000 parts in a bag)

| Part number | Ordering codes | |
|-------------|----------------|-----------------|
| | -BK option | -BK1 option |
| S505-500-R | BK-S505-500-R | BK1-S505-500-R |
| S505-800-R | BK-S505-800-R | BK1-S505-800-R |
| S505-1-R | BK-S505-1-R | BK1-S505-1-R |
| S505-1.25-R | BK-S505-1-25-R | BK1-S505-1-25-R |
| S505-1.6-R | BK-S505-1-6-R | BK1-S505-1-6-R |
| S505-2-R | BK-S505-2-R | BK1-S505-2-R |
| S505-2.5-R | BK-S505-2-5-R | BK1-S505-2-5-R |
| S505-3.15-R | BK-S505-3-15-R | BK1-S505-3-15-R |
| S505-4-R | BK-S505-4-R | BK1-S505-4-R |
| S505-5-R | BK-S505-5-R | BK1-S505-5-R |
| S505-6.3-R | BK-S505-6-3-R | BK1-S505-6-3-R |
| S505-8-R | BK-S505-8-R | BK1-S505-8-R |
| S505-10-R | BK-S505-10-R | BK1-S505-10-R |
| S505-12-R | BK-S505-12-R | BK1-S505-12-R |

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. 2037 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

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