

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 1641-31003-1025, 1641-31003-1026,
- CCC self declaration: 2020970207000246
- 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 |

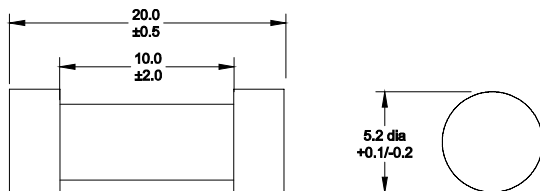
Product specifications

| 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 | | | | | |

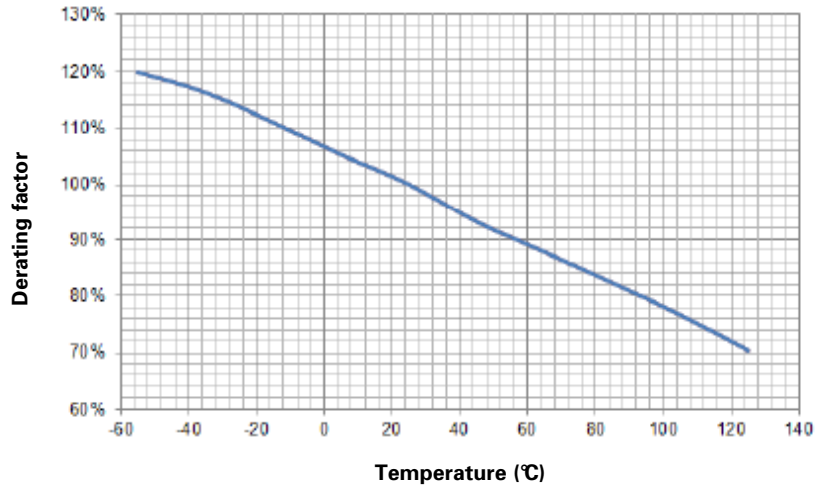
- 1 Interrupting ratings 500 mA to 10 A measured at 70% to 80% PF on AC. 12 A measured at 100% PF on AC.
- 2 Typical DC cold resistance measured at <10% of rated current at an ambient temperature of +20 ° C (reference only)
- 3 Typical pre-arcing (I²t) measured at listed interrupting rating and voltage.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

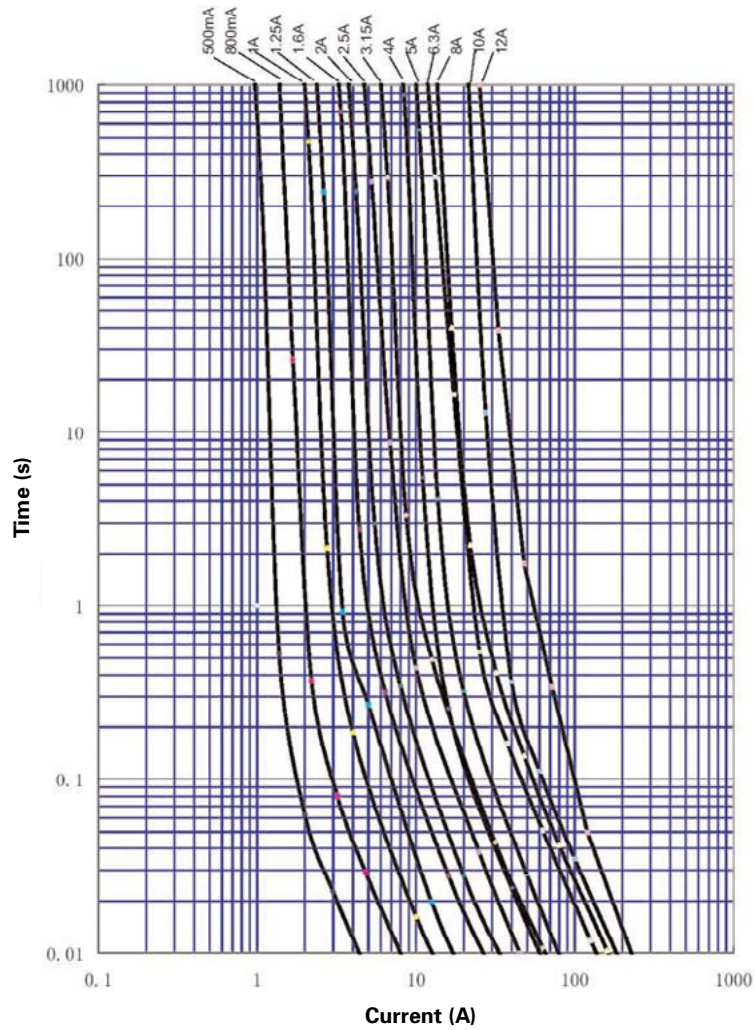
Dimensions (mm)



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

© 2020 Eaton
All Rights Reserved
Printed in USA
Publication No. 2037
October 2020

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.



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Cartridge Fuses](#) category:

Click to view products by [Eaton](#) manufacturer:

Other Similar products are found below :

[MBO-20](#) [MDX-3-2/10](#) [AGC-V-3-12-R](#) [BK1-S500-1-6-R](#) [BK1-S501-3-15-R](#) [BK1-S505-1-R](#) [BK1-S505-5-R](#) [20.0M6.3X32F](#) [FSC-3.5A](#)
[3AG3](#) [3AG5](#) [3AG8](#) [MDM-5](#) [MDX-5](#) [MKB-1/8](#) [BK1/S501-400-R](#) [BK1-S505-4-R](#) [BK1/S506-80-R](#) [BK/ABS-20](#) [BK/S506-V-400-R](#)
[BP/GMA-3A](#) [3AG4](#) [S506-V-400-R](#) [BKABS-30](#) [3NA3 814](#) [3NA3 836](#) [3NE4 101](#) [3NE8 024-1](#) [BK/C515S-1.5-R](#) [8.0M5X20M](#) [BP/GMA-1A](#)
[BK/C520-1.5-R](#) [GAB5](#) [002621009](#) [BK-AGC-B-2-R](#) [002631001](#) [002631006](#) [004112134](#) [004112135](#) [004116101](#) [004119100](#) [004119101](#)
[004119102](#) [004119103](#) [004119104](#) [004139100](#) [004139101](#) [004139200](#) [004139201](#) [004139202](#)