

S501

5 mm x 20 mm Fast-acting ceramic tube fuses



Product features

- Fast-acting high breaking capacity
- Optional axial leads available
- 5 mm x 20 mm physical size
- Ceramic tube with silver-plated (50 mA-400 mA) and nickel-plated (500 mA-10 A) endcaps.
- Designed to IEC 60127-2

Agency information

- cURus: File E19180, Guide JDYX2, JDYX8
- CSA Component Acceptance: File 53787
- SEMKO Approval: File 413779
- VDE Approval: File 40015517
- IMQ Approval: File EB405
- CCC Approval: File 2005010207155691
- BSI Approval: File KM55676

Ordering information

- Specify packaging, product and option code
- Ratings above 6.3 A have a 0.8 mm diameter lead
- With TR2 packaging code, lead wire length is 19.05 mm

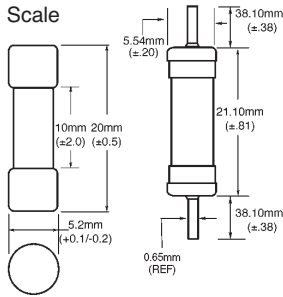
| Electrical Characteristics | | | | | | | |
|----------------------------|------------------|------------------|-----------------------|--------|--------------------|--------|-----------------|
| I_n | 1.5 I_n min | 2.1 I_n max | 2.75 I_n min max | | 4 I_n min max | | 10 I_n max |
| 50mA-4A | 60 min | 30 min | 10 ms | 2 sec | 3 ms | 300 ms | 20 ms |
| 5A-6.3A | 60 min | 30 min | 10 ms | 3 sec | 3 ms | 300 ms | 20 ms |
| 8A-10A | 30 min | 30 min | 40 ms | 20 sec | 10 ms | 1s | 30 ms |

| Specifications | | | | | | | | | | | | |
|----------------|--------------------|---|--|--|---|------------------|-----|-----|-------|-------|-----|-----------------|
| Product Code | Voltage Rating Vac | Interrupting Rating at Rated Voltage (50Hz) Vac | Typical DC Cold Resistance (Ω)* | Typical Melting I_t^{\dagger} (amps) | Typical Voltage Drop (mV) ‡ | Agency Approvals | | | | | | |
| | | | | | | IMQ | VDE | BSI | SEMKO | cURus | CCC | MITI/JET |
| S501-50-R | 250 | 1500 | 157.5 | 0.0017 | 9000 | X | X | X | X | X | X | X |
| S501-63-R | 250 | 1500 | 39.0 | 0.0005 | 3300 | | | | | X | X | X |
| S501-80-R | 250 | 1500 | 27.9 | 0.0011 | 2600 | | | | | X | | X |
| S501-100-R | 250 | 1500 | 20.0 | 0.0018 | 2300 | | | | | X | | X |
| S501-125-R | 250 | 1500 | 12.3 | 0.0037 | 1900 | | | | | X | | X |
| S501-160-R | 250 | 1500 | 8.5 | 0.008 | 1600 | X | X | X | X | X | X | X |
| S501-200-R | 250 | 1500 | 6.0 | 0.02 | 1350 | X | X | X | X | X | X | X |
| S501-250-R | 250 | 1500 | 4.4 | 0.027 | 1300 | X | X | X | X | X | X | X |
| S501-315-R | 250 | 1500 | 3.3 | 0.01 | 1400 | X | X | X | X | X | X | X |
| S501-400-R | 250 | 1500 | 2.2 | 0.018 | 1200 | | | | | X | | X |
| S501-500-R | 250 | 1500 | 0.460 | 0.038 | 1050 | X | X | X | X | X | X | X |
| S501-630-R | 250 | 1500 | 0.340 | 0.064 | 1200 | | | | | X | | X |
| S501-800-R | 250 | 1500 | 0.245 | 0.097 | 490 | X | X | X | X | X | X | X |
| S501-1-R | 250 | 1500 | 0.231 | 0.146** | 330 | | X | | X | X | X | X |
| S501-1.25-R | 250 | 1500 | 0.176 | 0.313** | 297 | | | | X | X | X | X |
| S501-1.6-R | 250 | 1500 | 0.113 | 0.748** | 239 | | X | | X | X | X | X |
| S501-2-R | 250 | 1500 | 0.073 | 2.0 | 205 | X | X | X | X | X | X | X ‡ |
| S501-2.5-R | 250 | 1500 | 0.053 | 3.9 | 190 | X | X | X | X | X | X | X ‡ |
| S501-3.15-R | 250 | 1500 | 0.037 | 8.1 | 160 | X | X | X | X | X | X | X ‡ |
| S501-4-R | 250 | 1500 | 0.027 | 14 | 160 | X | X | X | X | X | X | X ‡ |
| S501-5-R | 250 | 1500 | 0.019 | 25 | 155 | X | X | X | X | X | X | X ‡ |
| S501-6.3-R | 250 | 1500 | 0.014 | 48 | 150 | X | X | X | X | X | X | X |
| S501-8-R | 250 | 1500 | 0.009 | 104 | 102 | X | X | X | X | X | | X |
| S501-10-R | 250 | 1500 | 0.008 | 155 | 111 | X | X | X | X | X | | X |

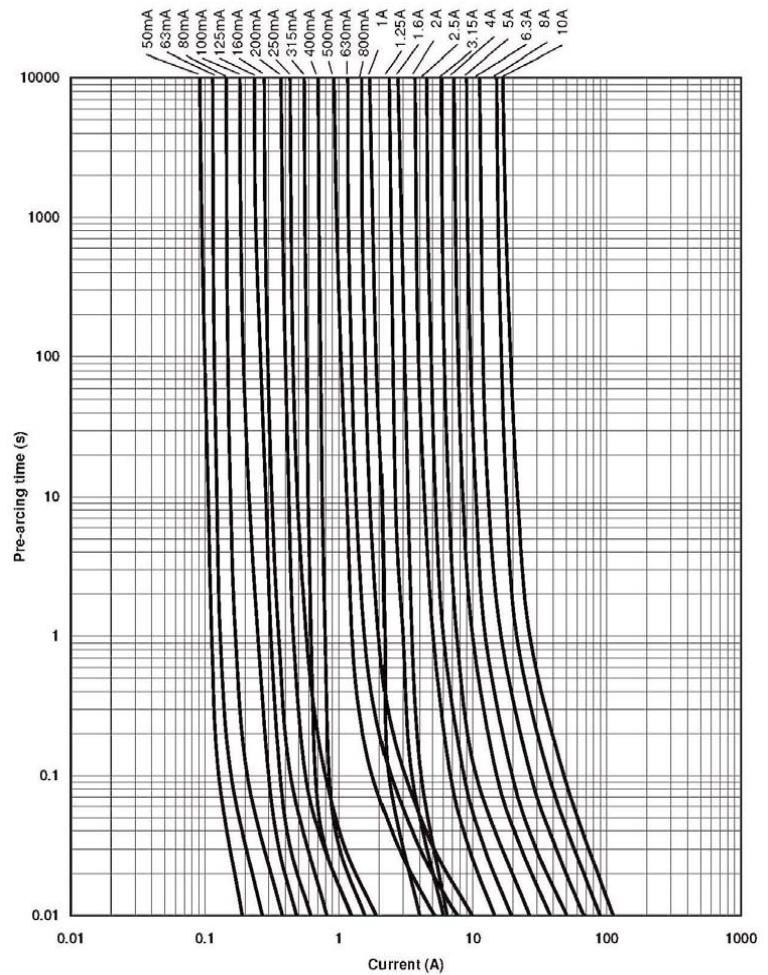
* DC Cold Resistance (measured at <10% of rated current)
 ** I_t^{\dagger} of 1A, 1.25A & 1.6A is measured at 10 I_n DC
 † Typical Voltage Drop (voltage drop was measured at 20°C ambient temperature at rated current)
 ‡ CSA approvals on these ratings will not be marked on the fuse cap

Dimensions - mm

Drawing Not to Scale



Time - Current Curve



| Packaging Code | |
|----------------|---|
| Packaging Code | Description |
| BK | 100 fuses packed into a cardboard carton |
| BK1 | 1000 fuses packed into a poly bag |
| TR2 | 1500 fuses packed into tape on a reel (19.05 mm lead wire length) |

| Option Code | |
|-------------|---|
| Option Code | Description |
| V | Axial leads - copper tinned wire with nickel-plated brass endcaps |

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
www.eaton.com/electronics

© 2017 Eaton
All Rights Reserved
Printed in USA
Publication No. 2051 BU-SB11296
June 2017

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Eaton:

[BK/S501-63-R](#) [BK/S501-250-R](#) [BK/S501-80-R](#) [BK/S501-8-R](#) [BK/S501-6.3-R](#) [BK/S501-50-R](#) [BK/S501-5-R](#)
[BK/S501-500-R](#) [BK/S501-3.15-R](#) [BK/S501-200-R](#) [BK/S501-2.5-R](#) [BK/S501-2-R](#) [BK/S501-160-R](#) [BK/S501-125-R](#)
[BK/S501-100-R](#) [BK/S501-4-R](#) [BK/S501-800-R](#) [S501-10-R](#) [BK1-S501-630-R](#) [BK-S501-1-R](#) [BK-S501-630-R](#) [S501-1-](#)
[R](#) [S501-315-R](#) [S501-400-R](#) [S501-630-R](#) [BK1-S501-1-6-R](#) [BK1-S501-2-5-R](#) [BK-S501-V-1-6-R](#) [S501-1-25A](#) [S501-1-](#)
[6A](#) [S501-1-6-R](#) [S501-2-5-R](#) [TR2-S501-V-6-3R](#) [BK-S501-10-R](#) [BK1-S501-100-R](#) [BK1-S501-10-R](#) [BK1-S501-125-R](#)
[BK1-S501-160-R](#) [BK1-S501-1-R](#) [BK1-S501-200-R](#) [BK1-S501-250-R](#) [BK1-S501-2-R](#) [BK1-S501-315-R](#) [BK1-S501-](#)
[400-R](#) [BK1-S501-4-R](#) [BK1-S501-500-R](#) [BK1-S501-50-R](#) [BK1-S501-5-R](#) [BK1-S501-63-R](#) [BK1-S501-800-R](#) [BK1-](#)
[S501-80-R](#) [BK1-S501-8-R](#) [BK-S501-125MA](#) [BK-S501-160MA](#) [BK-S501-2A](#) [BK-S501-800MA](#) [BK-S501-V-100-R](#) [BK-](#)
[S501-V-10A](#) [BK-S501-V-10-R](#) [BK-S501-V-125-R](#) [BK-S501-V-160-R](#) [BK-S501-V-1-R](#) [BK-S501-V-200-R](#) [BK-S501-V-](#)
[250-R](#) [BK-S501-V-2-5-R](#) [BK-S501-V-2-R](#) [BK-S501-V-3-15R](#) [BK-S501-V-4-R](#) [BK-S501-V-500-R](#) [BK-S501-V-50-R](#)
[BK-S501-V-5-R](#) [BK-S501-V-63-R](#) [BK-S501-V-63R81](#) [BK-S501-V-800-R](#) [BK-S501-V-80-R](#) [BK-S501-V-8-R](#)
[BK1/S501-1.25-R](#) [S501-100-R](#) [S501-125-R](#) [S501-160-R](#) [S501-1A](#) [S501-200-R](#) [S501-250-R](#) [S501-2-R](#) [S501-](#)
[315MA](#) [S501-400MA](#) [S501-4-R](#) [S501-500-R](#) [S501-50-R](#) [S501-5-R](#) [S501-630MA](#) [S501-63-R](#) [S501-800-R](#) [S501-80-](#)
[R](#) [S501-8A](#) [S501-8-R](#) [BK1/S501-100-R](#) [BK1/S501-10-R](#) [BK1/S501-125-R](#) [BK1/S501-160-R](#)