



**THE DATASHEET OF
BK1/S501-1-R**



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 10I_n DC

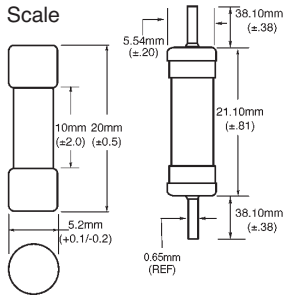
† Typical Voltage Drop (voltage drop was measured at 20°C ambient temperature at rated current)

‡ CSA approvals on these ratings will not be marked on the fuse cap

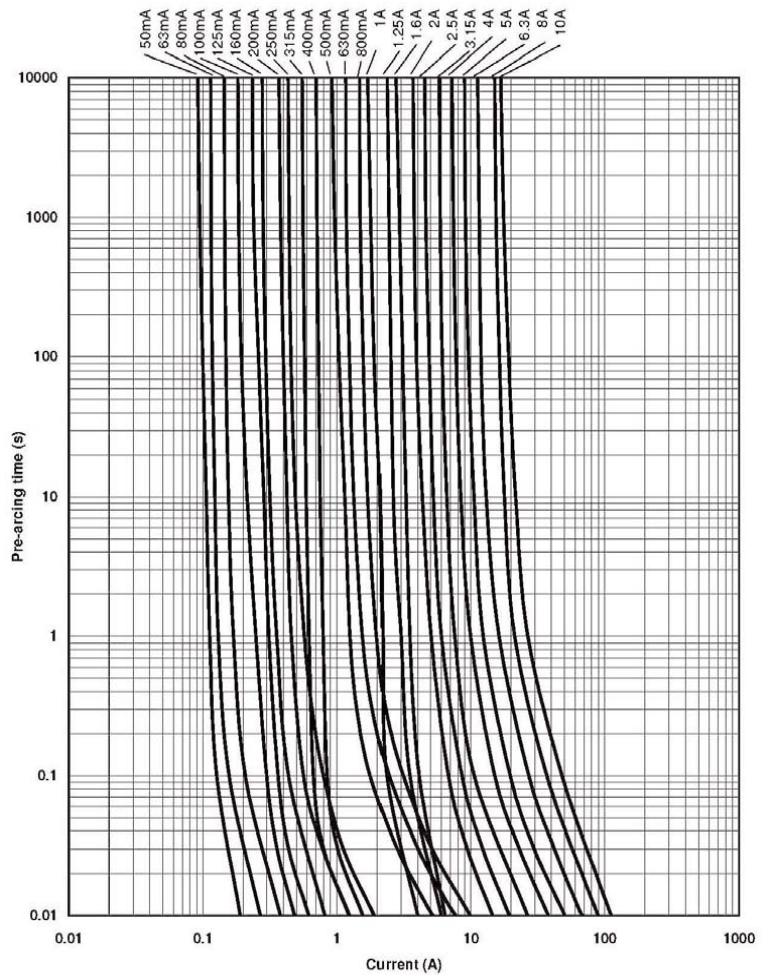


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Dimensions - mm
Drawing Not to Scale



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 |

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



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