

# 5 x 20mm Fuses

## S501 Series, Fast-Acting, Ceramic Tube

### Description

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



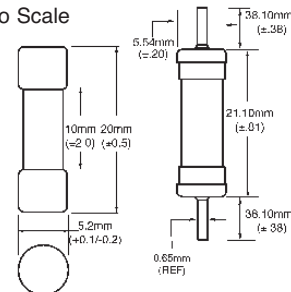
| Electrical Characteristics |                    |        |                    |        |                  |        |                   |
|----------------------------|--------------------|--------|--------------------|--------|------------------|--------|-------------------|
| I <sub>n</sub>             | 1.5 I <sub>n</sub> |        | 2.1 I <sub>n</sub> |        | 4 I <sub>n</sub> |        | 10 I <sub>n</sub> |
|                            | min                | max    | min                | max    | min              | max    | 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            | 1 s    | 30 ms             |

### 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

### Dimensions - mm

Drawing Not to Scale



### Ordering

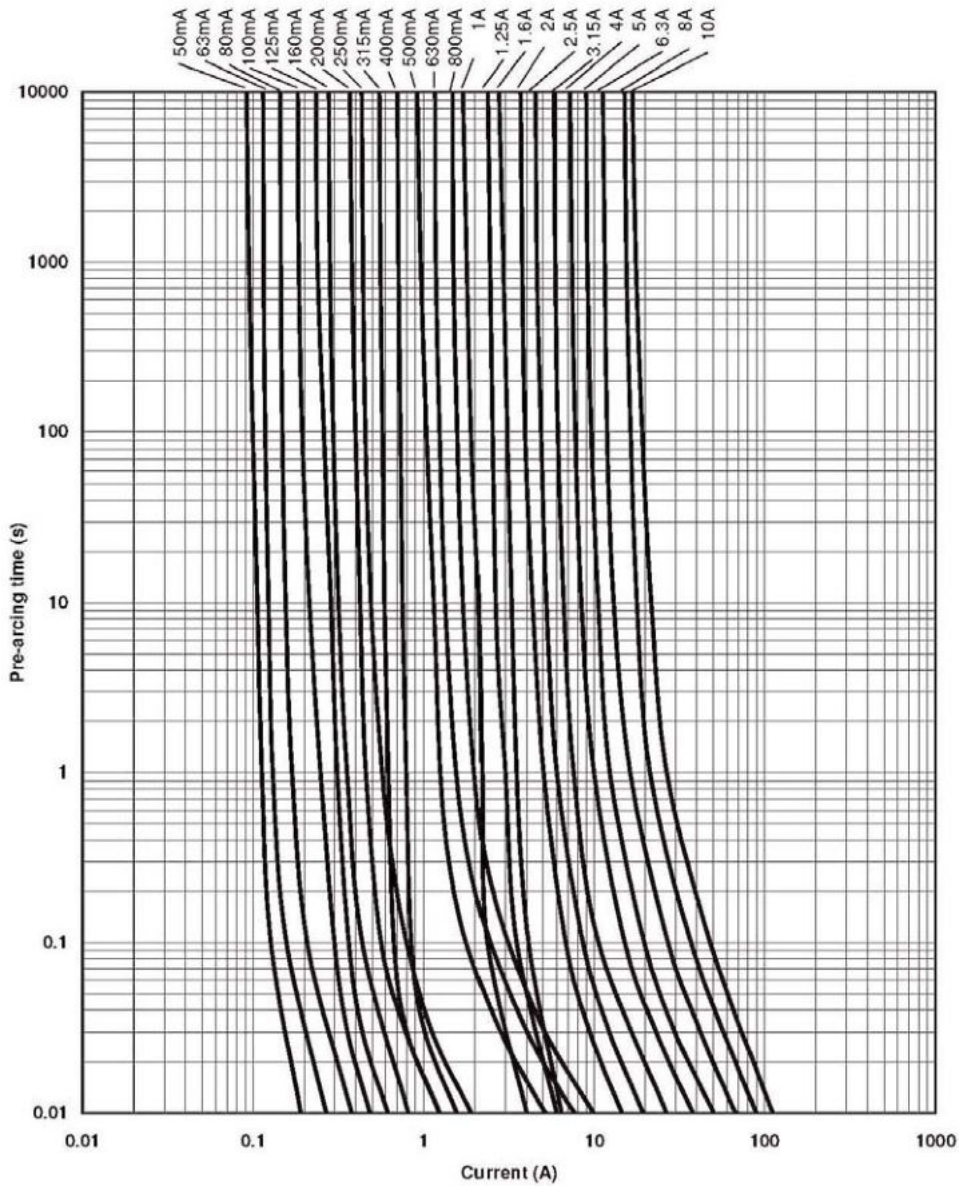
- Specify packaging, product, and option code
- Ratings above 6.3A have a 0.8mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

### Specifications

| Product Code | Voltage Rating Vac | Interrupting Rating at Rated Voltage (50Hz) Vac | Typical DC Cold Resistance (Ω)* | Typical Melting I <sup>†</sup> t (amps) | Typical Voltage Drop (mV)† | Agency Approvals |     |     |       |       |     |          |     |
|--------------|--------------------|---|---------------------------------|---|----------------------------|------------------|-----|-----|-------|-------|-----|----------|-----|
|              |                    |   |                                 |   |                            | IMQ              | VDE | BSI | SEMKO | cURus | CCC | MITI/JET | CSA |
| 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   |          | 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        | X‡  |
| S501-2.5-R   | 250                | 1500  | 0.053                           | 3.9                                     | 190                        | X                | 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        | X‡  |
| S501-4-R     | 250                | 1500  | 0.027                           | 14                                      | 160                        | X                | X   | X   | X     | X     | X   | X        | X‡  |
| S501-5-R     | 250                | 1500  | 0.019                           | 25                                      | 155                        | X                | 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                           | N/A                                     | N/A                        | X                | X   | X   | X     | X     |     |          | X   |
| S501-10-R    | 250                | 1500  | 0.008                           | N/A                                     | N/A                        | X                | X   | X   | X     | X     |     |          | X   |

\* DC Cold Resistance (measured at <10% of rated current)  
 \*\* I<sup>†</sup>t of 1A, 1.25A & 1.6A is measured at 10I<sub>n</sub> 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

## Time -Current Curve



| <b>Packaging Code</b> |   |
|-----------------------|---|
| <b>Packaging Code</b> | <b>Description</b>  |
| <b>BK</b>             | 100 fuses packed into a cardboard carton                          |
| <b>BK1</b>            | 1,000 fuses packed into a poly bag                                |
| <b>TR2</b>            | 1,500 fuses packed into tape on a reel (19.05mm lead wire length) |

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

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