

# S500

  
5 mm x 20 mm Fast-acting glass tube fuses

RoHS



### Product features

- Fast-acting, low breaking capacity
- Optional axial leads available
- 5 mm x 20 mm physical size
- Glass tube with silver-plated (32-125 mA) and nickel-plated (160 mA-10 A) endcaps
- Designed to IEC 60127-2 (160 mA-10 A)

| Electrical Characteristics |                  |                  |                   |       |                |        |                 |
|----------------------------|------------------|------------------|-------------------|-------|----------------|--------|-----------------|
| $I_n$                      | 1.5 $I_n$<br>min | 2.1 $I_n$<br>max | 2.75 $I_n$<br>min | max   | 4 $I_n$<br>min | max    | 10 $I_n$<br>max |
| 32mA-125mA                 | 60 min           | 30 min           | –                 | –     | –              | –      | –               |
| 160mA-6.3A                 | 60 min           | 30 min           | 50 ms             | 2 sec | 10 ms          | 300 ms | 20 ms           |
| 8A-10A                     | 30 min           | 30 min           | 50 ms             | 2 sec | 10 ms          | 400 ms | 40 ms           |

### Agency information

- cURus: File E19180, Guide JDYX2, JDYX8
- CSA Component Acceptance: File 1803366
- SEMKO Approval: File 414552
- VDE Approval: File 40014109
- BSI Approval: File KM55676
- IMQ Approval: File CA03.00097
- CCC Approval: File 2005010207155694

### Ordering information

- Specify product code
- Insert packaging code prefix before part number. E.g. BK/S500-32-R
- Ratings above 6.3 A have a 0.8 mm diameter lead (axial lead)
- Specify option code if desired
- For axial leads, insert "V" between catalog series and amp rating. E.g. S500-V-100-R

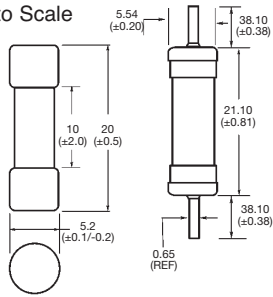
| Specifications |                       |                                                              |                                       |                                          |                                  |                  |     |     |     |     |       |     |
|----------------|-----------------------|--------------------------------------------------------------|---------------------------------------|------------------------------------------|----------------------------------|------------------|-----|-----|-----|-----|-------|-----|
| Part Number    | Voltage Rating<br>Vac | Interrupting Rating<br>(amps) at Rated<br>Voltage (50Hz) Vac | Typical DC<br>Cold Resistance<br>(Ω)* | Typical<br>Melting I <sup>†</sup><br>AC† | Maximum<br>Voltage<br>Drop (mV)‡ | Agency Approvals |     |     |     |     |       |     |
|                |                       |                                                              |                                       |                                          |                                  | cURus            | CSA | CCC | BSI | VDE | SEMKO | IMQ |
| S500-32-R      | 250                   | 35                                                           | 40                                    | 0.000047                                 | 3200                             |                  |     |     |     |     |       |     |
| S500-40-R      | 250                   | 35                                                           | 25                                    | 0.00011                                  | 2500                             |                  |     |     |     |     |       |     |
| S500-50-R      | 250                   | 35                                                           | 17                                    | 0.00020                                  | 2400                             |                  |     |     |     |     |       |     |
| S500-63-R      | 250                   | 35                                                           | 125                                   | 0.00057                                  | 2000                             |                  |     |     |     |     |       |     |
| S500-80-R      | 250                   | 35                                                           | 5.0                                   | 0.0012                                   | 1200                             |                  |     |     |     |     |       |     |
| S500-100-R     | 250                   | 35                                                           | 3.8                                   | 0.003                                    | 1100                             |                  |     |     |     |     |       |     |
| S500-125-R     | 250                   | 35                                                           | 2.8                                   | 0.005                                    | 1000                             |                  |     |     |     |     |       |     |
| S500-160-R     | 250                   | 35                                                           | 9.1                                   | 0.008                                    | 2000                             | X                | X   | X   | X   | X   | X     | X   |
| S500-200-R     | 250                   | 35                                                           | 6.8                                   | 0.016                                    | 1700                             | X                | X   | X   | X   | X   | X     | X   |
| S500-250-R     | 250                   | 35                                                           | 4.3                                   | 0.28                                     | 1400                             | X                | X   | X   | X   | X   | X     | X   |
| S500-315-R     | 250                   | 35                                                           | 3.1                                   | 0.58                                     | 1300                             | X                | X   | X   | X   | X   | X     | X   |
| S500-400-R     | 250                   | 35                                                           | 2.0                                   | 0.18                                     | 1100                             | X                | X   | X   | X   | X   | X     | X   |
| S500-500-R     | 250                   | 35                                                           | 0.26                                  | 0.18                                     | 220                              | X                | X   | X   | X   | X   | X     | X   |
| S500-630-R     | 250                   | 35                                                           | 0.20                                  | 0.35                                     | 220                              | X                | X   | X   | X   | X   | X     | X   |
| S500-800-R     | 250                   | 35                                                           | 0.14                                  | 0.67                                     | 190                              | X                | X   | X   | X   | X   | X     | X   |
| S500-1-R       | 250                   | 35                                                           | 0.125                                 | 0.60                                     | 200                              | X                | X   | X   | X   | X   | X     | X   |
| S500-1.25-R    | 250                   | 35                                                           | 0.096                                 | 0.84                                     | 200                              | X                | X   | X   | X   | X   | X     | X   |
| S500-1.6-R     | 250                   | 35                                                           | 0.066                                 | 1.6                                      | 190                              | X                | X   | X   | X   | X   | X     | X   |
| S500-2-R       | 250                   | 35                                                           | 0.043                                 | 4.2                                      | 150                              | X                | X   | X   | X   | X   | X     | X   |
| S500-2.5-R     | 250                   | 35                                                           | 0.034                                 | 6.1                                      | 150                              | X                | X   | X   | X   | X   | X     | X   |
| S500-3.15-R    | 250                   | 35                                                           | 0.025                                 | 13                                       | 130                              | X                | X   | X   | X   | X   | X     | X   |
| S500-4-R       | 250                   | 40                                                           | 0.021                                 | 22                                       | 130                              | X                | X   | X   | X   | X   | X     | X   |
| S500-5-R       | 250                   | 50                                                           | 0.014                                 | 42                                       | 120                              | X                | X   | X   | X   | X   | X     | X   |
| S500-6.3-R     | 250                   | 63                                                           | 0.010                                 | 69                                       | 120                              | X                | X   | X   | X   | X   | X     | X   |
| S500-8-R       | 250                   | 80                                                           | 0.010                                 | N/A                                      | 120                              | X                | X   |     | X   | X   | X     |     |
| S500-10-R      | 250                   | 100                                                          | 0.008                                 | N/A                                      | 120                              | X                | X   |     | X   | X   | X     |     |

\* DC Cold Resistance (Measured at &lt;10% of rated current)

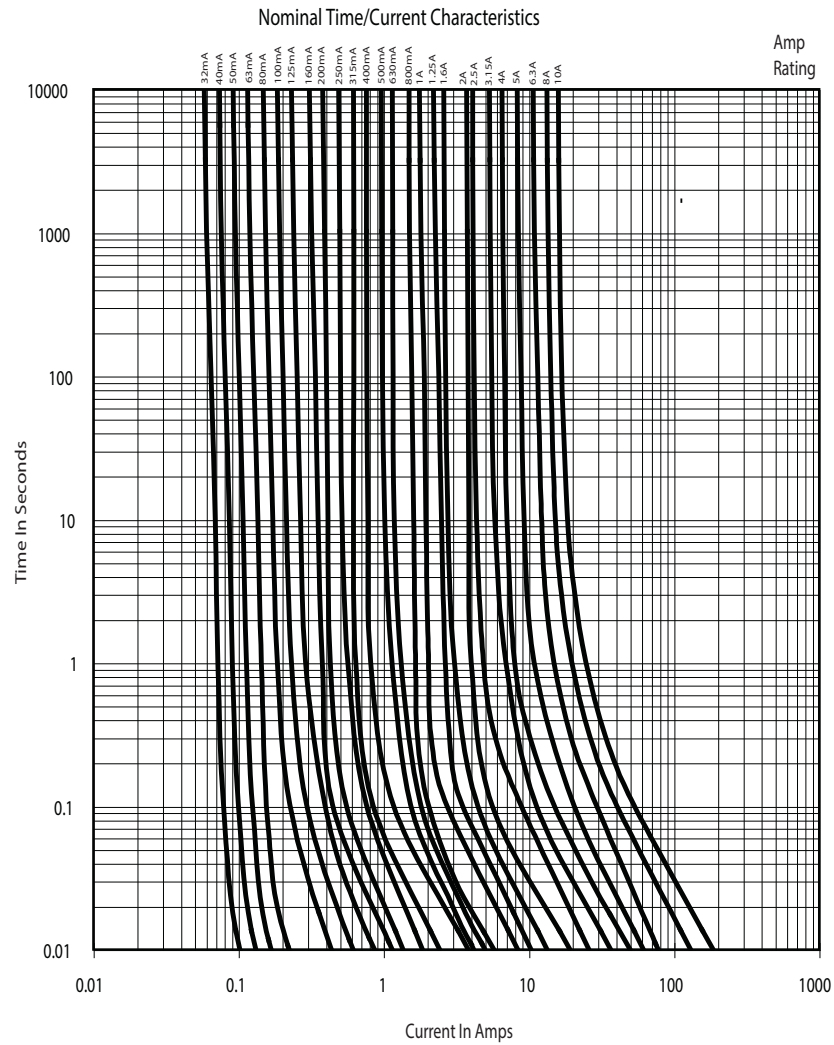
† Typical Melting I<sup>†</sup> t<sup>†</sup> (I<sup>†</sup> was measured at listed interrupting rating and rated voltage)

‡ Maximum Voltage Drop (Voltage drop was measured at +20 °C ambient temperature at rated current)

**Dimensions - mm**  
Drawing Not to Scale



**Time-current Curve**



| Packaging Code   |                                          |
|------------------|------------------------------------------|
| Packaging Prefix | Description                              |
| BK               | 100 fuses packed into a cardboard carton |
| BK1*             | 1,000 fuses packed into a poly bag       |

\* Not available for axial lead version

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

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