

# 5 x 20mm, Fast-Acting, Glass Tube Fuses

## S500 Series

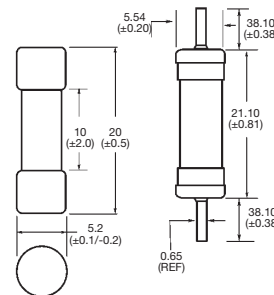


### Description

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

### Dimensions - mm

Drawing Not to Scale



| Electrical Characteristics |                    |                    |                     |      |                  |       |                   |
|----------------------------|--------------------|--------------------|---------------------|------|------------------|-------|-------------------|
| I <sub>n</sub>             | 1.5 I <sub>n</sub> | 2.1 I <sub>n</sub> | 2.75 I <sub>n</sub> |      | 4 I <sub>n</sub> |       | 10 I <sub>n</sub> |
|                            | min                | max                | min                 | max  | min              | max   | max               |
| 32mA-125mA                 | 60min              | 30min              | —                   | —    | —                | —     | —                 |
| 160mA-6.3A                 | 60min              | 30min              | 50ms                | 2sec | 10ms             | 300ms | 20ms              |
| 8A-10A                     | 30min              | 30min              | 50ms                | 2sec | 10ms             | 400ms | 40ms              |

### Agency Information

- cURus: File E19180, Guide JDYX2, JDYX8
- SEMKO Approval: File 913796
- VDE Approval: File 40014109
- BSI Approval: File KM55676
- IMQ Approval: File CA03.00097
- CCC Approval: File 2005010207155694
- PSE Approval File: JET1641-31003-1013, JET1641-31003-1014, JET1641-31003-1015, JET1641-31003-1016

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

### Ordering

Specify product code

- Insert packaging code prefix before part number. E.g., BK/S500-32-R

Specify option code if desired

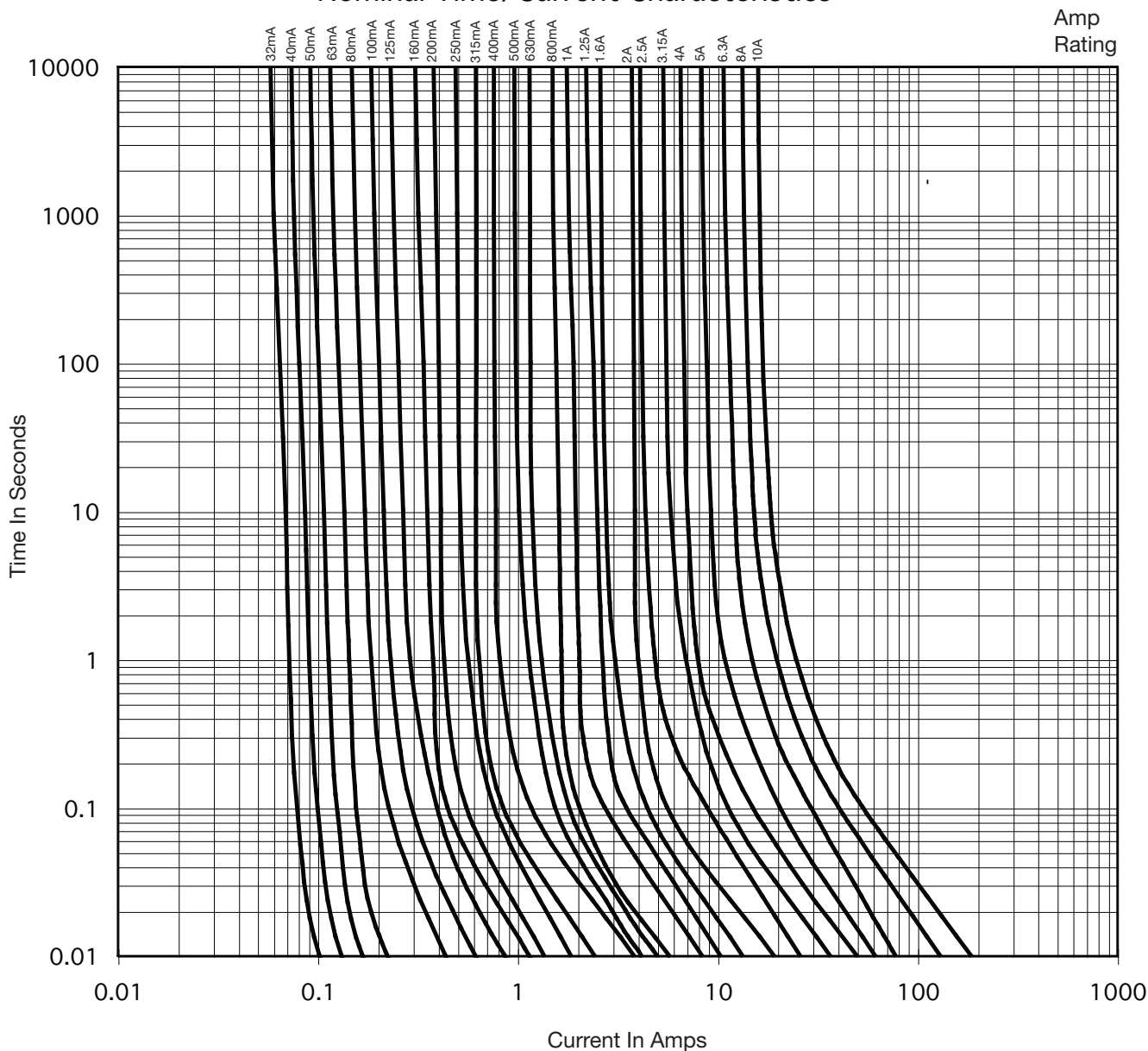
- For axial leads, insert "V" between catalog series and amp rating. E.g., S500-V-100-R

| Part Number | Voltage Rating Vac | Interrupting Rating at Rated Voltage (50Hz) Vac (amps) | Typical DC Cold Resistance (Ω)* | Typical Melting I <sup>†</sup> t AC <sup>†</sup> | Max Voltage Drop (mV) <sup>‡</sup> | Agency Information |     |     |     |          |       |     |
|-------------|--------------------|--------------------------------------------------------|---------------------------------|--------------------------------------------------|------------------------------------|--------------------|-----|-----|-----|----------|-------|-----|
|             |                    |                                                        |                                 |                                                  |                                    | cURus              | CCC | BSI | VDE | PSE      | 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                              | 0.0002                                           | 2400                               |                    |     |     |     |          |       |     |
| S500-63-R   | 250                | 35                                                     | 12.5                            | 0.00057                                          | 2000                               |                    |     |     |     |          |       |     |
| S500-80-R   | 250                | 35                                                     | 5                               | 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   |
| S500-200-R  | 250                | 35                                                     | 6.8                             | 0.016                                            | 1700                               | X                  | X   | X   | X   |          | X     | X   |
| S500-250-R  | 250                | 35                                                     | 4.3                             | 0.28                                             | 1400                               | X                  | X   | X   | X   |          | X     | X   |
| S500-315-R  | 250                | 35                                                     | 3.1                             | 0.58                                             | 1300                               | X                  | X   | X   | X   |          | X     | X   |
| S500-400-R  | 250                | 35                                                     | 2                               | 0.18                                             | 1100                               | X                  | X   | X   | X   |          | X     | X   |
| S500-500-R  | 250                | 35                                                     | 0.26                            | 0.18                                             | 220                                | X                  | X   | X   | X   |          | X     | X   |
| S500-630-R  | 250                | 35                                                     | 0.2                             | 0.35                                             | 220                                | X                  | X   | X   | X   |          | X     | X   |
| S500-800-R  | 250                | 35                                                     | 0.14                            | 0.67                                             | 190                                | X                  | X   | X   | X   |          | X     | X   |
| S500-1-R    | 250                | 35                                                     | 0.125                           | 0.6                                              | 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                                                     | 0.01                            | 69                                               | 120                                | X                  | X   | X   | X   | X        | X     | X   |
| S500-8-R    | 250                | 80                                                     | 0.01                            | NA                                               | 120                                | X                  |     | X   | X   | X        | X     |     |
| S500-10-R   | 250                | 100                                                    | 0.008                           | NA                                               | 120                                | X                  |     | X   | X   | X        | X     |     |

\* DC Cold Resistance (Measured at <10% of rated current)  
<sup>†</sup> Typical Melting I<sup>†</sup>t (I<sup>†</sup>t was measured at listed interrupting rating and rated voltage)  
<sup>‡</sup> Maximum Voltage Drop (Voltage drop was measured at 20°C ambient temperature at rated current)

# Time-current Curve

## Nominal Time/Current Characteristics



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

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

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