

# 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)

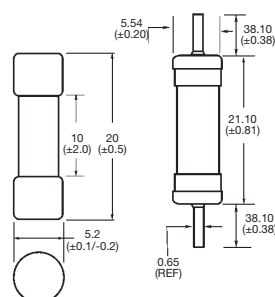
| Electrical Characteristics |                  |                  |            |      |         |       |                 |
|----------------------------|------------------|------------------|------------|------|---------|-------|-----------------|
| $I_n$                      | 1.5 $I_n$<br>min | 2.1 $I_n$<br>max | 2.75 $I_n$ |      | 4 $I_n$ |       | 10 $I_n$<br>max |
|                            |                  |                  | min        | max  | min     | 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

### Dimensions - mm

Drawing Not to Scale



- 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

| Specifications |                    |  |                                 |                         |                        |                    |     |     |     |     |       |     |
|----------------|--------------------|--|---------------------------------|-------------------------|------------------------|--------------------|-----|-----|-----|-----|-------|-----|
| Part Number    | Voltage Rating Vac | Interrupting Rating at Rated Voltage (50Hz) Vac (amps) | Typical DC Cold Resistance (Ω)* | Typical Melting I²t AC† | Max Voltage Drop (mV)‡ | 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     |     |

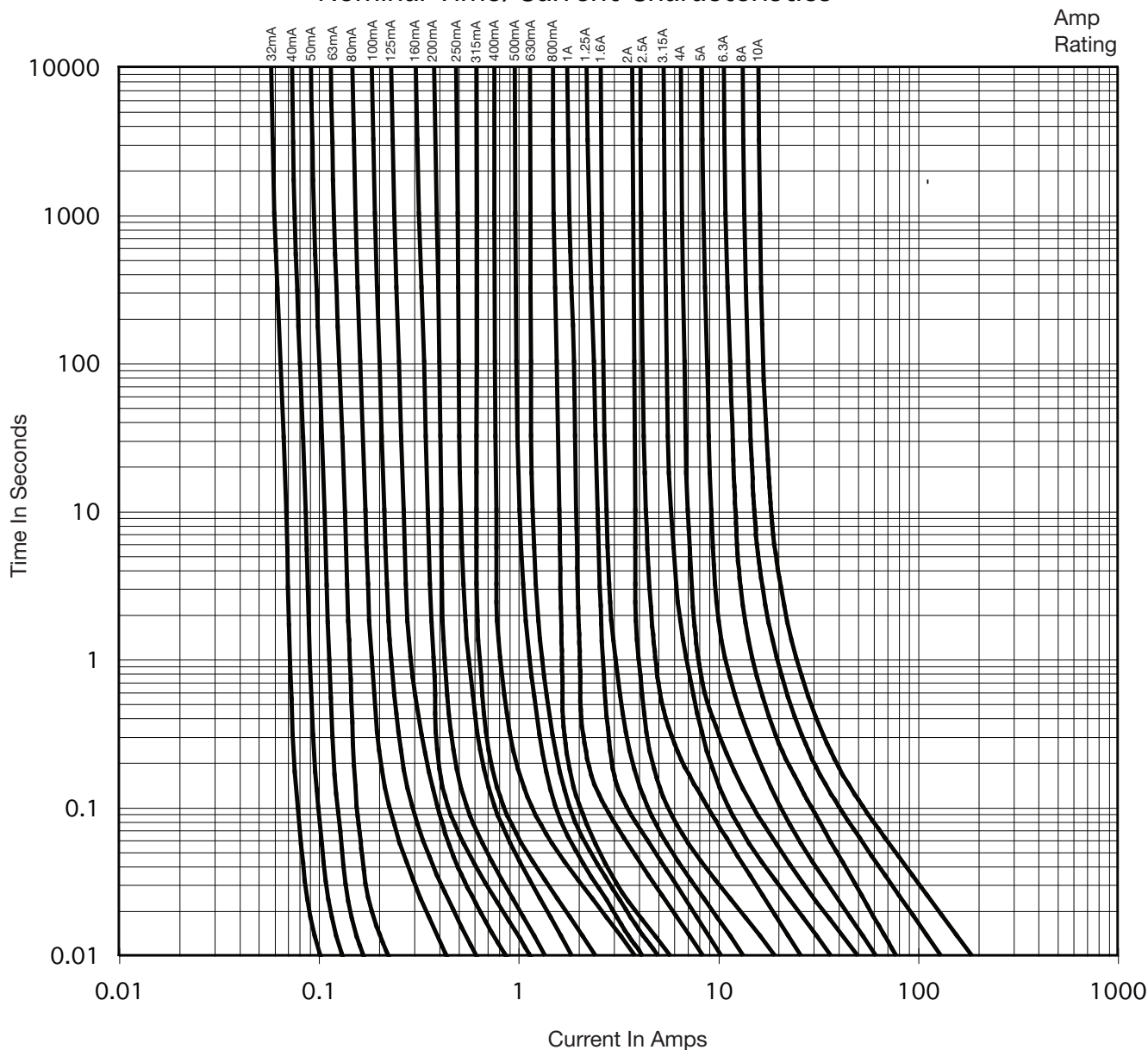
\* DC Cold Resistance (Measured at <10% of rated current)

† Typical Melting  $I^2t$  ( $I^2t$  was measured at listed interrupting rating and rated voltage)

‡ 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  |
| 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 (19.05mm lead wire length) |

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

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