

# 5 x 20mm Fuses

# S500 Series, Fast-Acting, Glass Tube

#### **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 |        |        |         |       |                     |        |       |       |
|----------------------------|--------|--------|---------|-------|---------------------|--------|-------|-------|
|                            | 1.5 ln | 2.1 ln | 2.75 ln |       | 2.1 ln 2.75 ln 4 ln |        |       | 10 In |
| ln e                       | min    | max    | min     | max   | min                 | max    | 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

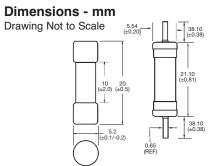
#### **Ordering**

Specify product code

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







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

Specify option code if desired

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

|                    |         |                     | Speci           | fications                |            |                  |     |     |     |            |       |     |
|--------------------|---------|---------------------|-----------------|--------------------------|------------|------------------|-----|-----|-----|------------|-------|-----|
|                    | Voltage | Interrupting Rating | Typical DC      | Typical                  | Maximum    |                  |     |     |     |            |       |     |
| <b>Part Number</b> | Rating  | (amps) at Rated     | Cold Resistance | Melting I <sup>2</sup> t | Voltage    | Agency Approvals |     | ls  |     |            |       |     |
|                    | Vac     | Voltage (50Hz) Vac  | (Ω)*            | AC†                      | Drop (mV)‡ | cURus            | CSA | CCC | BSI | <b>VDE</b> | 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                | Χ   | Х   | Χ   | Х          | X     | Х   |
| S500-200-R         | 250     | 35                  | 6.8             | 0.016                    | 1700       | Х                | Χ   | Х   | Χ   | Х          | Х     | Х   |
| S500-250-R         | 250     | 35                  | 4.3             | 0.28                     | 1400       | X                | Χ   | Х   | Χ   | Х          | X     | Х   |
| S500-315-R         | 250     | 35                  | 3.1             | 0.58                     | 1300       | X                | Χ   | Х   | Χ   | Х          | X     | Х   |
| S500-400-R         | 250     | 35                  | 2.0             | 0.18                     | 1100       | X                | Χ   | Х   | Χ   | Х          | X     | Х   |
| S500-500-R         | 250     | 35                  | 0.26            | 0.18                     | 220        | X                | Χ   | Χ   | Χ   | Χ          | X     | Х   |
| S500-630-R         | 250     | 35                  | 0.20            | 0.35                     | 220        | X                | Χ   | Χ   | Χ   | Χ          | X     | Х   |
| S500-800-R         | 250     | 35                  | 0.14            | 0.67                     | 190        | X                | Χ   | Χ   | Χ   | Χ          | X     | Х   |
| S500-1-R           | 250     | 35                  | 0.125           | 0.60                     | 200        | Х                | Χ   | Χ   | Χ   | Х          | Х     | Х   |
| S500-1.25-R        | 250     | 35                  | 0.096           | 0.84                     | 200        | X                | Χ   | Χ   | Χ   | Χ          | X     | X   |
| S500-1.6-R         | 250     | 35                  | 0.066           | 1.6                      | 190        | X                | Χ   | Χ   | Χ   | Χ          | X     | X   |
| S500-2-R           | 250     | 35                  | 0.043           | 4.2                      | 150        | X                | Χ   | Χ   | Χ   | Χ          | X     | Х   |
| S500-2.5-R         | 250     | 35                  | 0.034           | 6.1                      | 150        | X                | Χ   | Χ   | Χ   | Χ          | X     | Х   |
| S500-3.15-R        | 250     | 35                  | 0.025           | 13                       | 130        | X                | Χ   | Х   | Х   | Х          | Х     | Х   |
| S500-4-R           | 250     | 40                  | 0.021           | 22                       | 130        | X                | Χ   | Х   | Х   | Х          | X     | Х   |
| S500-5-R           | 250     | 50                  | 0.014           | 42                       | 120        | X                | Χ   | Х   | Х   | Х          | X     | Х   |
| S500-6.3-R         | 250     | 63                  | 0.010           | 69                       | 120        | X                | Χ   | Χ   | Χ   | Х          | X     | Х   |
| S500-8-R           | 250     | 80                  | 0.010           | N/A                      | 120        | Х                | Χ   |     | Х   | Х          | Х     |     |
| S500-10-R          | 250     | 100                 | 0.008           | N/A                      | 120        | Х                | Χ   |     | Χ   | Х          | Х     |     |

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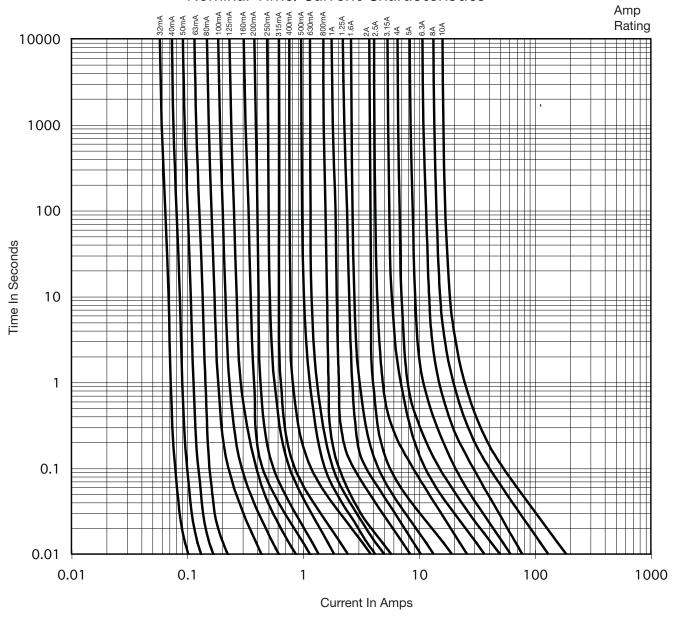
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DC Cold Resistance (Measured at <10% of rated current)
Typical Melting I²t (I²t was measured at listed interrupting rating and rated voltage)
Maximum Voltage Drop (Voltage drop was measured at 20°C ambient temperature at rated current)

## **Time-current Curve**

## Nominal Time/Current Characteristics



| Packaging Code   |   |  |  |  |
|------------------|---|--|--|--|
| Packaging Prefix | Description   |  |  |  |
| BK               | 100 fuses packed into a cardboard carton                          |  |  |  |
| BK1              | 1,000 fuses packed into a poly bag                                |  |  |  |
| TR2              | 1,500 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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# **Mouser Electronics**

**Authorized Distributor** 

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## Cooper Bussmann:

BK-S500-1-25A BK-S500-12-R BK1-S500-2A BK-S500-100MA BK-S500-10A BK-S500-125MA BK-S500-160MA
BK-S500-1-6A BK-S500-1A BK-S500-200MA BK-S500-250MA BK-S500-2-5A BK-S500-2A BK-S500-3-15A BKS500-315MA BK-S500-32MA BK-S500-400MA BK-S500-40MA BK-S500-4A BK-S500-500MA BK-S500-50MA BK-S500-5A BK-S500-630MA BK-S500-6-3A BK-S500-63MA BK-S500-800MA BK-S500-80MA BK-S500-8A S500-16R

### Eaton:

S500-12-R