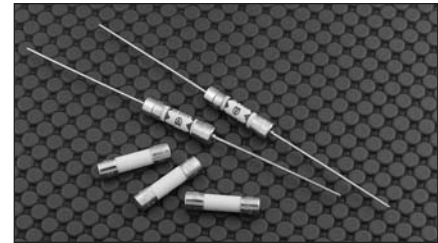


# 5 x 20mm Fuses

## S505 Series, Time-Delay, Ceramic Tube

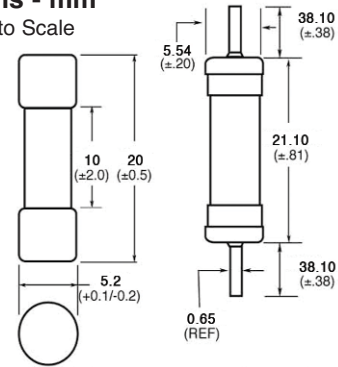
### Description

- Time-delay, high breaking capacity
- Optional axial leads available
- Ceramic tube, silver-plated endcap construction (500mA-800mA), nickel-plated brass endcap construction (1-12A)
- Optional sleeve is flexible flouropolymer (UL flammability rating VW-1)
- 5 x 20mm physical size
- Designed to IEC 60127-2 (500mA-10A) & extension 12A



### Dimensions - mm

Drawing Not to Scale



|                | Electrical Characteristics |        |                    |     |                     |     |                  |        |                   |     |
|----------------|----------------------------|--------|--------------------|-----|---------------------|-----|------------------|--------|-------------------|-----|
|                | 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> |     |
| I <sub>n</sub> | min                        | max    | min                | max | min                 | max | min              | max    | min               | max |
| <1A            | 60 min                     | 30 min | 250 ms             | 80s | 50 ms               | 5s  | 5 ms             | 150 ms |                   |     |
| 1A-3.15A       | 60 min                     | 30 min | 750ms              | 80s | 95 ms               | 5s  | 10 ms            | 150 ms |                   |     |
| 4A-6.3A        | 60 min                     | 30 min | 750ms              | 80s | 150 ms              | 5s  | 10 ms            | 150 ms |                   |     |
| 8A-12A         | 30 min                     | 30 min | 750ms              | 80s | 150 ms              | 5s  | 10 ms            | 150 ms |                   |     |

### Agency Information

- UL Recognized Card: Guide JDYX2, File E19180
- CSA Component Acceptance: File 53787
- SEMKO: File 500496, 816547
- VDE: File 40014091, 40024352, 40023140
- BSI: File KM55676
- IMQ: File 00100, 00529
- PES+JET: File 1641-31003-1004, 1641-31003-1011
- CCC: File 2002010207011295
- EK: File SU05011-4012A, SU0511-5014A
- FIMKO: File FI21555

- Ratings above 4A have a maximum 0.81mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

### Ordering

- Specify packaging code
  - Insert packaging code prefix before part number. E.g. BK (or BK1)/S505-1-R
- Specify option codes if desired
  - For axial leads, insert "V" between catalog series and amp rating. E.g., BK/S505-V-1-R

### Specifications

| Part Number | Voltage Rating Vac | Interrupting Rating (amps) @ Rated Vac (50Hz)* | Typical DC Cold Resistance (Ω)** | Typical Pre-arching I <sub>t</sub> AC*** | Typical Voltage Drop (mV)† | Agency Approvals |     |       |    |     |        |     |    |     |
|-------------|--------------------|--|----------------------------------|--|----------------------------|------------------|-----|-------|----|-----|--------|-----|----|-----|
|             |                    |  |                                  |  |                            | IMQ              | VDE | SEMKO | UL | CCC | PSEJET | CSA | EK | BSI |
| S505-500-R  | 250                | 1500   | 0.5070                           | 0.188†                                   | 295                        | X                | X   | X     | X  | X   |        | X   |    | X   |
| S505-800-R  | 250                | 1500   | 0.2370                           | 0.632†                                   | 189                        | X                | X   | X     | X  | X   |        | X   |    | X   |
| S505-1-R    | 250                | 1500   | 0.1401                           | 1.28                                     | 152.5                      | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-1.25-R | 250                | 1500   | 0.1075                           | 2.22                                     | 150                        | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-1.6-R  | 250                | 1500   | 0.0700                           | 6.78                                     | 125                        | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-2-R    | 250                | 1500   | 0.0545                           | 9.60                                     | 118.5                      | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-2.5-R  | 250                | 1500   | 0.0395                           | 16.60                                    | 115                        | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-3.15-R | 250                | 1500   | 0.0305                           | 36.60                                    | 102.5                      | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-4-R    | 250                | 1500   | 0.0185                           | 38.45†                                   | 86.5                       | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-5-R    | 250                | 1500   | 0.0131                           | 71.30†                                   | 77.5                       | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-6.3-R  | 250                | 1500   | 0.0033                           | 197                                      | 75                         | X                | X   | X     | X  | X   | X      | X   | X  | X   |
| S505-8-R    | 250                | 1500   | 0.0067                           | 311                                      | 75                         | X                | X   | X     | X  |     | X      | X   | X  | X   |
| S505-10-R   | 250                | 1500   | 0.0061                           | 397                                      | 72                         | X                | X   | X     | X  |     | X      | X   | X  | X   |
| S505-12-R   | 250                | 1000   | 0.0053                           | 713.7†                                   | 77                         |                  | X   |       | X  |     |        |     |    |     |

\* Interrupting ratings (500mA to 10A were measured at 70% to 80% PF on.

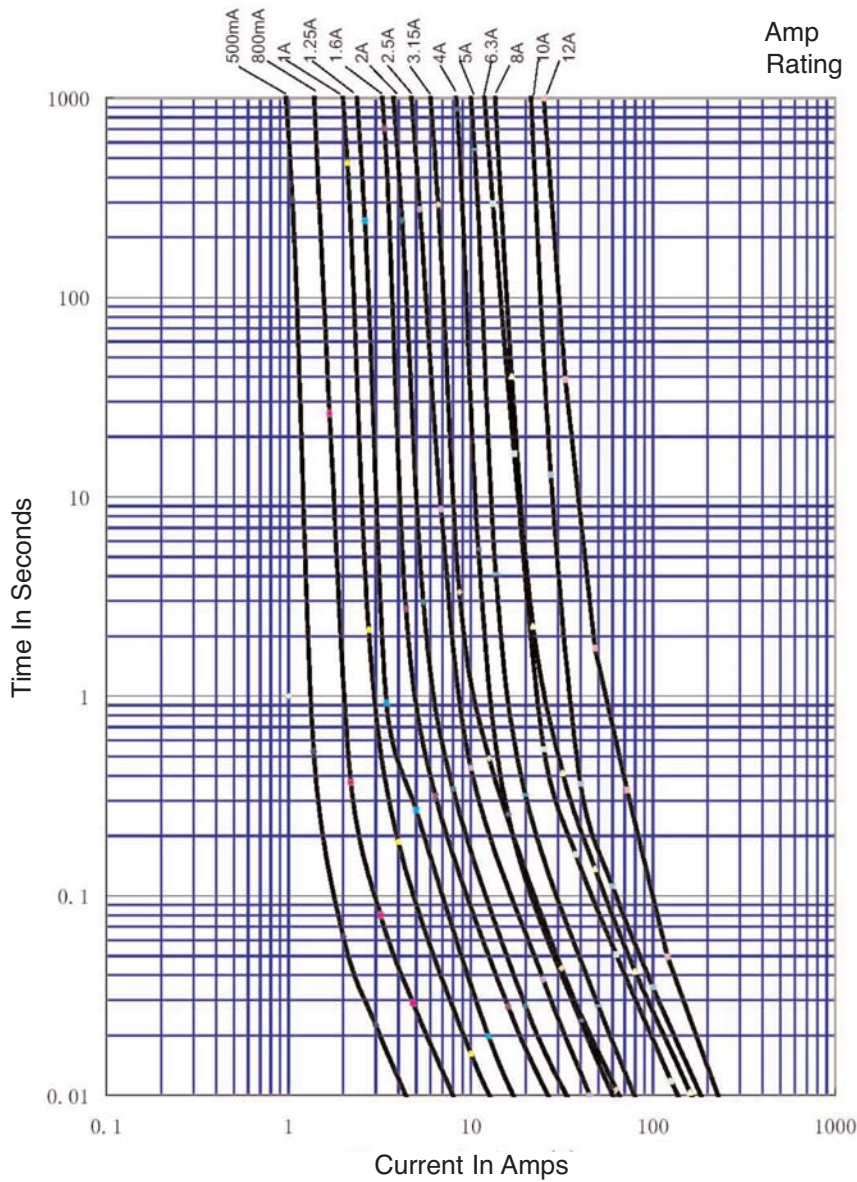
\*\* Typical DC Cold Resistance (Measured At <10% of rated current).

\*\*\* Typical Pre-Arching I<sub>t</sub> (Measured at listed interrupting rating and rated voltage if not specified).

† The typical I<sub>t</sub> value was measured at 10 times of rated current under DC.

‡ Typical Voltage Drop (voltage drop was measured at 20°C ambient temperature at rated current).

S505-R(500mA to 12A) Nominal Current Vs. Time Curve



| Packaging Code        |   |
|-----------------------|---|
| Packaging Code 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 overcaps |

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