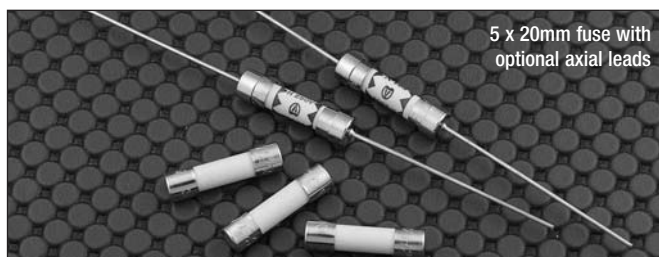


## 5 x 20mm Time-Delay, Ceramic Tube Fuses S505 Series



### Description

- Time-delay, high breaking capacity
- Available with optional axial leads
- 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). Consult factory for details.
- 5 x 20mm physical size
- Designed to IEC 60127-2 (500mA-10A) & extension 12A

| Electrical Characteristics |                   |                   |                    |       |                 |       |                  |        |
|----------------------------|-------------------|-------------------|--------------------|-------|-----------------|-------|------------------|--------|
| Amps                       | 1.5I <sub>n</sub> | 2.1I <sub>n</sub> | 2.75I <sub>n</sub> |       | 4I <sub>n</sub> |       | 10I <sub>n</sub> |        |
|                            | Min min.          | Max min.          | Min ms             | Max s | Min ms          | Max s | Min ms           | Max ms |
| <1A                        | 60                | 30                | 250                | 80s   | 50              | 5s    | 5                | 150    |
| 1A-3.15A                   | 60                | 30                | 750                | 80s   | 95              | 5s    | 10               | 150    |
| 4A-6.3A                    | 60                | 30                | 750                | 80s   | 150             | 5s    | 10               | 150    |
| 8A-12A                     | 30                | 30                | 750                | 80s   | 150             | 5s    | 10               | 150    |

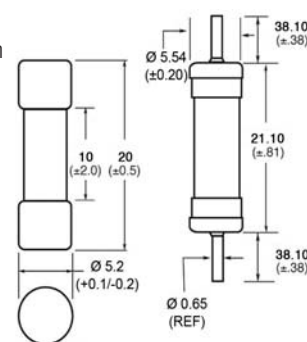
### Specifications

| Product Code | Voltage Rating AC | Interrupting Rating at Rated Voltage (50Hz) AC <sup>1</sup> | Typical DC Cold Resistance (Ω) <sup>2</sup> | Typical Pre-arcing I²t (A²s)AC <sup>3</sup> | Typical Voltage Drop (mV) <sup>4</sup> | Agency Information |     |       |       |                       |          |                  |                 |     |
|--------------|-------------------|-------------------------------------------------------------|---------------------------------------------|---------------------------------------------|----------------------------------------|--------------------|-----|-------|-------|-----------------------|----------|------------------|-----------------|-----|
|              |                   |                                                             |                                             |                                             |                                        | IMQ <sup>5</sup>   | VDE | SEMKO | cURus | CCC/ CQC <sup>5</sup> | PSE/ JET | CSA <sup>5</sup> | KC <sup>5</sup> | BSI |
| S505-500-R   | 250               | 1500                                                        | 0.5070                                      | 0.188 <sup>x</sup>                          | 295                                    | X                  | X   | X     | X     | X                     |          | X                |                 | X   |
| S505-800-R   | 250               | 1500                                                        | 0.2370                                      | 0.632 <sup>x</sup>                          | 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 <sup>x</sup>                          | 86.5                                   | X                  | X   | X     | X     | X                     | X        | X                | X               | X   |
| S505-5-R     | 250               | 1500                                                        | 0.0131                                      | 71.30 <sup>x</sup>                          | 77.5                                   | X                  | X   | X     | X     | X                     | X        | X                | X               | X   |
| S505-6.3-R   | 250               | 1500                                                        | 0.0102                                      | 111 <sup>x</sup>                            | 75                                     | X                  | X   | X     | X     | X                     | X        | X                | X               | X   |
| S505-8-R     | 250               | 1500                                                        | 0.0077                                      | 228 <sup>x</sup>                            | 73                                     | X                  | X   | X     | X     | X <sup>6</sup>        | X        | X                | X               | X   |
| S505-10-R    | 250               | 1500                                                        | 0.0061                                      | 397                                         | 72                                     | X                  | X   | X     | X     | X <sup>6</sup>        | X        | X                | X               | X   |
| S505-12-R    | 250               | 1000                                                        | 0.0053                                      | 713.7 <sup>x</sup>                          | 77                                     |                    | X   |       | X     |                       |          |                  |                 |     |

1. Interrupting ratings: 500mA to 10A were measured at 70% to 80% PF on AC, 12A was measured at 100% PF on AC.
2. Typical DC Cold Resistance (measured at <10% of rated current).
3. Typical Pre-Arching I<sup>2</sup>t (measured at listed interrupting rating and rated voltage if not specified); With "X" specified, the typical I<sup>2</sup>t value is measured at 10 times of rated current under DC.

### Dimensions - mm

- Ratings above 6.3A have a maximum 0.81mm diameter lead
- With TR2 packaging code, leadwire length is 19.05mm



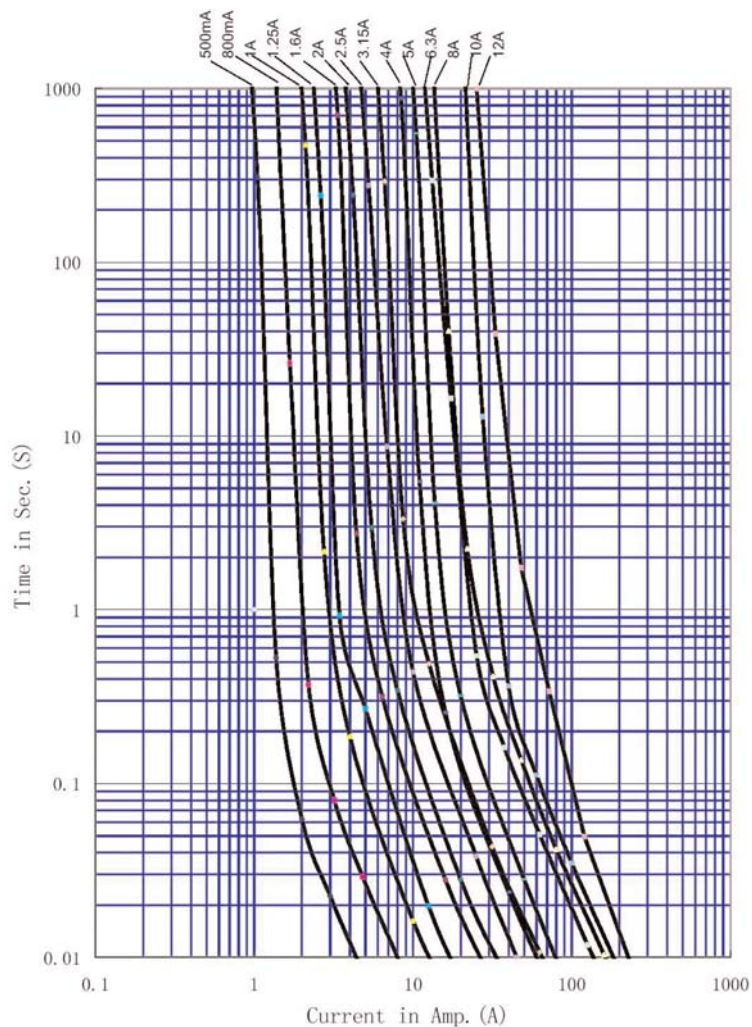
### Agency Information

- UL Recognized Card: Guide JDYX2, File E19180, JDYX8, File E19180
- CSA Component Acceptance: File 53787
- SEMKO: File 816547, 1119019
- VDE: File 40014091, 40024352, 40023140
- BSI: File KM55676
- IMQ: File CA03.00100 and CA03.00529
- PES+JET: File 1641-31003-1009, 1641-31003-1010, 1641-31003-1011, 1641-31003-1012, 1641-31003-2001, 1641-31003-2002
- CCC: File 2002010207011295, CQC11012061930
- KC-Mark: File SU05011-4012A, SU05011-5004A

### Ordering

- Specify packaging code (insert packaging code prefix before part number) e.g., BK- (or BK1-/TR2-) 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

## Time-Current Curves



### Packaging Code

| Packaging Code Prefix | Description                                           |
|-----------------------|-------------------------------------------------------|
| BK-                   | 100 fuses packed into a cardboard carton              |
| BK1-                  | 1000 fuses packed into a poly bag                     |
| TR2-                  | 1500 fuses on tape and reel (19.05mm leadwire length) |

### Option Code

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

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