

**5mm x 20mm Fuses**  
**S504 Series, Time Delay, Glass Tube**

**Description**

- Time delay, low breaking capacity
- 5mm x 20mm physical size
- Glass tube, nickel-plated brass endcap construction
- Optional axial leads are .032" x 1.5" copper tinned
- Designed to IEC 60127-2 (50mA-6.3A)



| S504 ELECTRICAL CHARACTERISTICS |        |        |         |        |       |       |        |  |
|---------------------------------|--------|--------|---------|--------|-------|-------|--------|--|
| In                              | 2.1 In |        | 2.75 In |        | 4 In  |       | 10 In  |  |
|                                 | max    | min    | max     | min    | max   | min   | max    |  |
| 32mA-100mA                      | 2 min  | 200 ms | 10 sec  | 40 ms  | 3 sec | 10 ms | 300 ms |  |
| 125mA-6.3A                      | 2 min  | 600 ms | 10 sec  | 150 ms | 3 sec | 20 ms | 300 ms |  |

**Ordering**

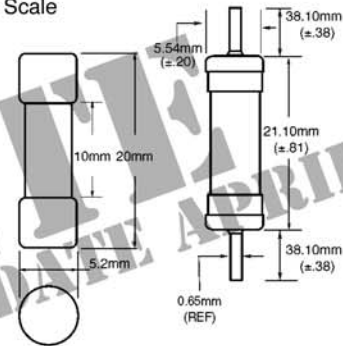
- Specify product code, option code and packaging code

**Agency Information**

- UL Recognized Card: (32mA-3.15A) Guide JDYX2, File E19180
- Semko Approval, 32mA-6.3A
- VDE Approval, 32mA-5A
- BSI Approval, 32mA-6.3A
- IMQ Approval, 32mA-6.3A
- MITI Approval, 1A-6.3A

**Dimensions**

Drawing Not to Scale



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

**SPECIFICATIONS**

| Product Code | Voltage Rating<br>AC | Interrupting Rating<br>at Rated Voltage (50Hz)<br>AC | Typical DC<br>Cold Resistance<br>(ohms)* | Typical<br>Melting I <sup>2</sup> t (A <sup>2</sup> Sec)<br>AC† | Typical<br>Voltage<br>Drop (mV)‡ |
|--------------|----------------------|--|--|---|----------------------------------|
| S504-32mA    | 250V                 | 35A  | 21.7                                     | 0.0014  | 1050                             |
| S504-40mA    | 250V                 | 35A  | 14.2                                     | 0.0034  | 920                              |
| S504-50mA    | 250V                 | 35A  | 9.5                                      | 0.006   | 800                              |
| S504-63mA    | 250V                 | 35A  | 7.1                                      | 0.012   | 760                              |
| S504-80mA    | 250V                 | 35A  | 4.5                                      | 0.015   | 580                              |
| S504-100mA   | 250V                 | 35A  | 2.8                                      | 0.022   | 490                              |
| S504-125mA   | 250V                 | 35A  | 2.0                                      | 0.034   | 390                              |
| S504-160mA   | 250V                 | 35A  | 1.3                                      | 0.052   | 320                              |
| S504-200mA   | 250V                 | 35A  | 1.0                                      | 0.078   | 340                              |
| S504-250mA   | 250V                 | 35A  | 0.66                                     | 0.17  | 270                              |
| S504-315mA   | 250V                 | 35A  | 0.46                                     | 0.41  | 250                              |
| S504-400mA   | 250V                 | 35A  | 0.37                                     | 0.61  | 210                              |
| S504-500mA   | 250V                 | 35A  | 0.27                                     | 0.75  | 168                              |
| S504-630mA   | 250V                 | 35A  | 0.19                                     | 1.3   | 158                              |
| S504-800mA   | 250V                 | 35A  | 0.13                                     | 3.1   | 132                              |
| S504-1A      | 250V                 | 35A  | 0.064                                    | 3.6   | 85                               |
| S504-1.25A   | 250V                 | 35A  | 0.046                                    | 7   | 80                               |
| S504-1.6A    | 250V                 | 35A  | 0.039                                    | 10  | 80                               |
| S504-2A      | 250V                 | 35A  | 0.029                                    | 17  | 80                               |
| S504-2.5A    | 250V                 | 35A  | 0.024                                    | 34  | 80                               |
| S504-3.15A   | 250V                 | 35A  | 0.018                                    | 56  | 75                               |
| S504-4A      | 250V                 | 35A  | 0.013                                    | 91  | 75                               |
| S504-5A      | 250V                 | 35A  | 0.0095                                   | 133   | 75                               |
| S504-6.3A    | 250V                 | 35A  | 0.0085                                   | 270   | 65                               |

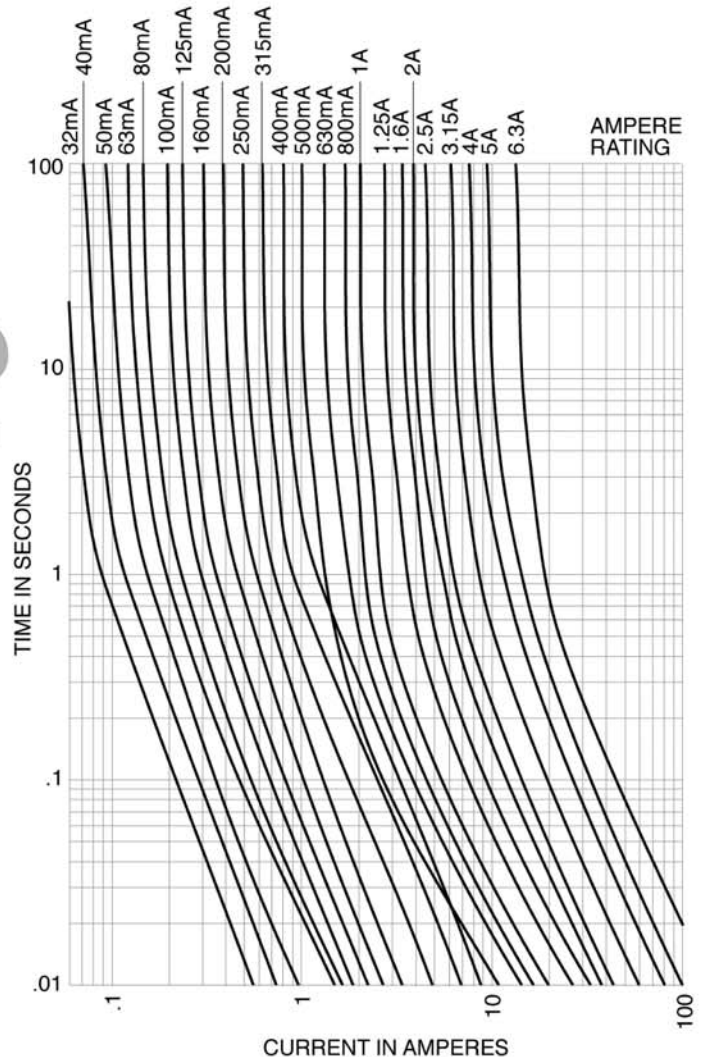
\* DC Cold Resistance (Measured at <10% of rated current)  
 † Typical Melting I<sup>2</sup>t (I<sup>2</sup>t was measured at listed interrupting rating and rated voltage)  
 ‡ Maximum Voltage Drop (Voltage drop was measured at 20°C ambient temperature at rated current)

**OBSOLETE**

**JUNE 30, 2009**  
**(LAST ORDER DATE**  
**APRIL 30, 2009)**

**RECOMMENDED**  
**REPLACEMENT**  
**S506 SERIES**

**TIME CURRENT CURVE**  
Time-Current Characteristic Curves—Average Melt



| OPTION CODE |  |
|-------------|--|
| Option Code | Description  |
| V           | Axial leads - copper tinned wire with nickel plated brass overcaps |

| PACKAGING CODE |   |
|----------------|---|
| Packaging Code | Description   |
| BK             | 100 pieces of fuses packed into a cardboard carton                          |
| BK1            | 1,000 pieces of fuses packed into a poly bag                                |
| TR2            | 1,500 pieces of fuses packed into tape on a reel (19.05mm lead wire length) |