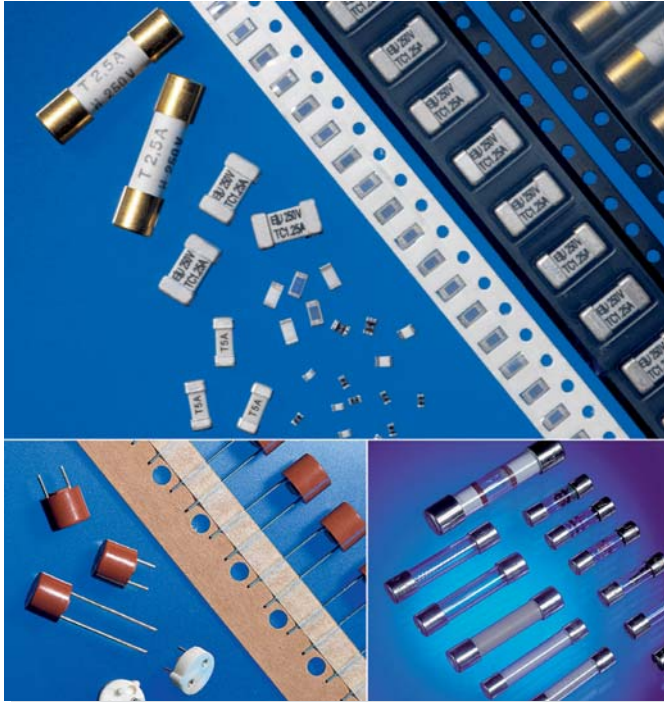


Miniature Fuses



SIBA Miniature Fuses

Sizes:

- Cylindrical fuses: 5 x 20 · 6.3 x 32 · 5 x 25
5 x 30 · 8 x 40 · 8 x 50
8 x 85 · 10 x 85 · 8 x 120
8 x 150 mm

- Radial lead

2 pin fuses: KS, Ø 8.4 mm

- SMD fuses:

Voltage ratings: 25 V - 10 kV

Operation class:

- F** fast acting
- T** time lag
- M** medium time lag
- FF** very fast acting
- TT** long time lag

Standards:

- IEC 60127
- DIN VDE 0820
- CEE4
- UL 248-14
- UL 512
- CSA-C22.2 No. 248.14

Approvals:



Features / Benefits

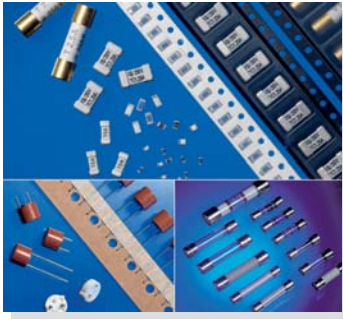
- ▷ Very high interrupting rating up to 70 kA
- ▷ High rated voltages up to 10 kV
- ▷ High fuse ratings available for semiconductor protection
- ▷ Fuse-bases, clips and accessories are available



Miniature Fuses

Selection Guide Fuse-Links

| Size | Rated Voltage [V] | Operating Class | Part No. | Selector Guide [Page] | RoHS Compliant |
|----------|----------------------|-------------------|---------------------|--------------------------|----------------|
| SMD | 25 | very quick acting | 151 000 | G 5 | ◇ |
| SMD | 32 | very quick acting | 152 000 | G 6 | ◇ |
| SMD | 32 | very quick acting | 153 000 | G 7 | ◇ |
| SMD | 63/125 | very quick acting | 154 000 | G 8 | ◇ |
| SMD | 65/125 | fast acting | 157 000 | G 9 | ◇ |
| SMD | 125 | time lag | 158 000 | G 11 | ◇ |
| SMD | 250 | time lag | 160 000 | G 12 | ◇ |
| SMD | 250 | flick acting | 161 000 | G 13 | ◇ |
| KS | 250 | fast acting | 164 000 | G 14 | ◇ |
| KS | 250 | medium time lag | 165 000 | G 15 | ◇ |
| KS | 250 | time lag | 166 000 | G 16 | ◇ |
| KS | 250 | fast acting | 164 500 | G 17 | ◇ |
| KS | 250 | time lag | 166 500 | G 18 | ◇ |
| 2.3 x 8 | 125 | flick acting | 196 000 | G 19 | ◇ |
| 5 x 20 | 250 | fast acting | 179 020 | G 20 | ◇ |
| 5 x 20 | 250 | fast acting | 179 021 | G 21 | ◇ |
| 5 x 20 | 250 | fast acting | 171 100 | G 22 | ◇ |
| 5 x 20 | 250 | medium time lag | 172 000 | G 23 | ◇ |
| 5 x 20 | 250 | medium time lag | 172 100 | G 23 | ◇ |
| 5 x 20 | 250 | medium time lag | 172 200 | G 24 | ◇ |
| 5 x 20 | 250 | time lag | 179 120 | G 25 | ◇ |
| 5 x 20 | 250 | time lag | 173 100 | G 26 | ◇ |
| 5 x 20 | 250 | time lag | 179 200 | G 27 | ◇ |
| 5 x 20 | 250 | time lag | 179 150 | G 28 | ◇ |
| 5 x 20 | 250 | time lag | 179 500 | G 29 | ◇ |
| 5 x 20 | 250 | very fast acting | 70 001 40 | G 30 | ◇ |
| 5 x 20 | 250/380 | very fast acting | 70 007 40 | G 31 | ◇ |
| 5 x 20 | 250 | long time lag | 190 000 | G 32 | ◇ |
| 6.3 x 32 | 250 | fast acting | 189 000 | G 33 | ◇ |
| 6.3 x 32 | 440/500 | fast acting | 189 020 | G 34 | ◇ |
| 6.3 x 32 | 600 | fast acting | 70 094.63 | G 36 | ◇ |
| 6.3 x 32 | 250 | time lag | 189 100 | G 37 | ◇ |
| 6.3 x 32 | 250/440/500 | time lag | 189 140 | G 38 | ◇ |
| 6.3 x 32 | 125/250 | time lag | 189 500 | G 40 | ◇ |
| 6.3 x 32 | 500/700 | very fast acting | 70 125 40 | G 41 | ◇ |
| 6.3 x 32 | 1000 | fast acting | 70 172 40 | G 43 | ◇ |
| 5 x 25 | 250 | fast acting | 171 526 | G 44 | ◇ |
| 5 x 25 | 250 | medium time lag | 172 526 | G 45 | ◇ |
| 5 x 25 | 250 | medium time lag | 70 016 07/70 017 07 | G 46 | ◇ |
| 5 x 20 | 250 | medium time lag | 70 014 07/70 012 05 | G 47 | ◇ |
| 5 x 25 | 450 | fast acting | 70 089 13 | G 48 | ◇ |
| 5 x 25 | 250 | fast acting | 171 525 | G 49 | ◇ |



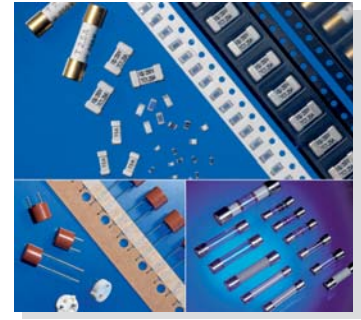
Miniature Fuses

Selection Guide Fuse-Links

| Size | Rated Voltage [V] | Operating Class | Part No. | Selector Guide [Page] | RoHS Compliant |
|---------|----------------------|-----------------|-----------|--------------------------|----------------|
| 5 x 25 | 250 | medium time lag | 172 525 | G 50 | ◇ |
| 5 x 30 | 500 | fast acting | 171 530 | G 51 | ◇ |
| 5 x 30 | 500 | medium time lag | 172 530 | G 52 | ◇ |
| 8 x 40 | 500 | M+ F | 183 000 | G 53 | ◇ |
| 8 x 50 | 1.2 kV | | 184 000 | G 54 | ◇ |
| 8 x 85 | 3 kV | | 185 000 | G 55 | ◇ |
| 10 x 85 | 3 kV | | 70 115 09 | G 56 | ◇ |
| 8 x 120 | 6 kV | | 186 000 | G 57 | ◇ |
| 8 x 150 | 10 kV | | 187 000 | G 58 | ◇ |

Selection Guide Fuse-Holder

| Size | Rated Voltage [V] | Rated Current [A] | Part No. | Selector Guide [Page] | RoHS Compliant |
|----------|----------------------|----------------------|-----------|--------------------------|----------------|
| KS | 250 | 6.3 | 166 602 | G 59 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 010 | G 61 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 018 | G 61 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 060 | G 62 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 015 | G 62 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 011 | G 63 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 012 | G 63 | ◇ |
| 6.3 x 32 | 250 | 10 | 199 022 | G 63 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 040 | G 64 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 030 | G 64 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 035 | G 64 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 045 | G 65 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 050 | G 65 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 055 | G 65 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 070 | G 65 | ◇ |
| 5 x 20 | 250 | 6.3 | 199 090 | G 65 | ◇ |
| 5 x 20 | 250 | 10/16 | 71 001 27 | G 67 | ◇ |
| 5 x 20 | 250 | 10/16 | 71 001 28 | G 67 | ◇ |
| 5 x 20 | 250 | 10/16 | 71 001 29 | G 67 | ◇ |
| 5 x 20 | 42 | 6.3 | 199 081 | G 66 | ◇ |
| 6.3 x 32 | 250 | 15 | 199 043 | G 66 | ◇ |
| 6.3 x 32 | 250 | 20 | 199 052 | G 66 | ◇ |



Miniature Fuses

Selection Guide Fuse-Holder

| Size | Rated Voltage [V] | Rated Current [A] | Part No. | Selector Guide [Page] | RoHS Compliant |
|---------------|----------------------|----------------------|-----------|--------------------------|-------------------|
| 5x20 + 6.3x32 | 250 | 10/20 | 71 001 23 | G 68 | ◇ |
| 5x20 | 250 | 10/20 | 72 001 08 | G 68 | ◇ |
| 6.3x32 | 250 | 10/20 | 72 001 09 | G 68 | ◇ |
| 5x20 + 6.3x32 | 250 | 6.3/16 | 71 001 14 | G 68 | ◇ |
| 5x20 | 250 | 6.3/16 | 72 001 08 | G 68 | ◇ |
| 6.3x32 | 250 | 6.3/16 | 72 001 09 | G 68 | ◇ |
| 5x20 + 6.3x32 | 250 | 10/16 | 71 001 16 | G 68 | ◇ |
| 5x20 | 250 | 10/16 | 72 001 08 | G 68 | ◇ |
| 6.3x32 | 250 | 10/16 | 72 001 09 | G 68 | ◇ |
| 5x20 + 6.3x32 | 250 | 10/120 | 71 001 24 | G 69 | ◇ |
| 5x20 | 250 | 10/120 | 72 001 08 | G 69 | ◇ |
| 6.3x32 | 250 | 10/120 | 72 001 09 | G 69 | ◇ |
| 5x20 + 5x25 | 250 | 6.3 | 71 001 10 | G 69 | ◇ |
| 5x20 | 250 | 6.3 | 72 001 05 | G 69 | ◇ |
| 5x25 | 250 | 6.3 | 72 001 06 | G 69 | ◇ |
| 5x20 + 5x25 | 1.2 kV | 6.3 | 71 034 01 | G 69 | ◇ |
| 5x20 + 5x25 | 3 kV | 6.3 | 72 037 01 | G 69 | ◇ |
| 5x20 + 5x25 | 6 kV | 6.3 | 72 040 01 | G 69 | ◇ |
| 5x20 + 5x25 | 10 kV | 6.3 | 72 043 01 | G 69 | ◇ |
| 10x85 | 3 kV | 6.3 | 71 037 02 | G 70 | |

Selection Guide Fuse-Clips

| Size | Rated Voltage AC [V] | Rated Current [A] | Part No. | Selector Guide [Page] | RoHS Compliant |
|-------|----------------------------|----------------------|----------|--------------------------|-------------------|
| ∅ 5 | 500 | 6.3 | 199 073 | G 59 | ◇ |
| ∅ 5 | 500 | 6.3 | 199 207 | G 59 | ◇ |
| ∅ 5 | 500 | 6.3 | 199 429 | G 59 | ◇ |
| ∅ 6.3 | 500 | 6.3 | 199 487 | G 59 | ◇ |
| ∅ 6.3 | 500 | 6.3 | 199 488 | G 59 | ◇ |

Selection Guide Push-on Caps

| Size | Rated Current [A] | Part No. | Selector Guide [Page] | RoHS Compliant |
|--------------------------------------------|----------------------|--------------|--------------------------|-------------------|
| ∅ 5 | 6.3 | 204 000 | G 60 | ◇ |
| ∅ 6.3 | 6.3 | 204 100 | G 60 | ◇ |
| Example of fuselink including Push-on caps | | (XXX XXX) AK | G 60 | ◇ |



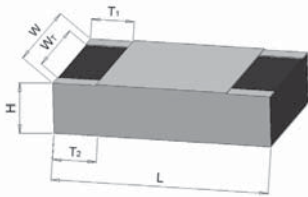
SMD Fuses

FF

| | | | |
|---------------------|------------------------------|--------------------------|------------------------------|
| Size 0402 | Rated voltage 25 V | Very Quick Acting | Standard UL 248-14 |
|---------------------|------------------------------|--------------------------|------------------------------|

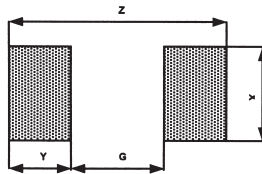
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | cURus | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|-------|-----------------|-------|
| 0.500 | 151 000.0.500 | | | 50 | | | 0.01 | 1 000 |
| 0.630 | 151 000.0.630 | | | 50 | | | 0.01 | 1 000 |
| 0.750 | 151 000.0.750 | | | 50 | | | 0.01 | 1 000 |
| 0.800 | 151 000.0.800 | | | 50 | | | 0.01 | 1 000 |
| 1 | 151 000.1 | 220 | 0.0039 | 50 | 140 | | 0.01 | 1 000 |
| 1.25 | 151 000.1.25 | 182 | 0.0059 | 50 | 111 | | 0.01 | 1 000 |
| 1.5 | 151 000.1.5 | 169 | 0.0065 | 50 | 80 | | 0.01 | 1 000 |
| 1.75 | 151 000.1.75 | 160 | 0.0077 | 50 | 75 | | 0.01 | 1 000 |
| 2 | 151 000.2 | 167 | 0.0101 | 50 | 68 | | 0.01 | 1 000 |

Dimensions



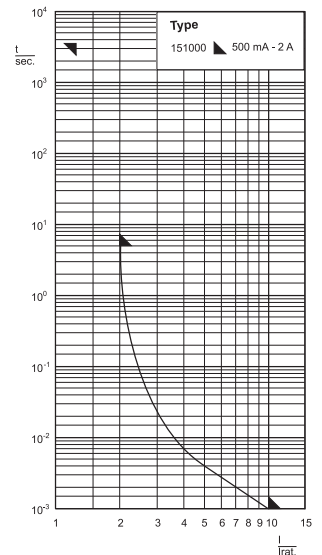
| | |
|----------------|-------------------|
| H | 0,32 ±0,05 mm |
| L | 1,0 ±0,05 mm |
| W | 0,5 ±0,05 mm |
| W _T | > 75 % of W |
| T ₁ | 0,2 +0,1/-0,15 mm |
| T ₂ | 0,2 ±0,1 mm |

Recommended pad layout



| | |
|------------------|---------|
| Reflow soldering | |
| G | 0,25 mm |
| Y | 0,6 mm |
| X | 0,55 mm |
| Z | 1,45 mm |

151.000



Pre-Arcing Time Limits

| Rated Current | 1.25 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|--------------------|---------------------|--------------------|---------------------|------------------|-------------------|
| 500 mA ▼ 2 A | > 1 h | < 5 s | - | - | < 1 ms |

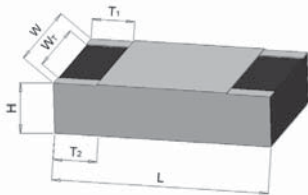

SMD Fuses
FF

 Size
0603

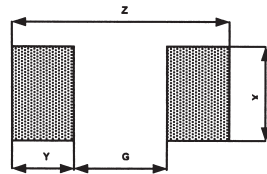
 Rated Voltage
32 V
Very Quick Acting

 Standard
UL 248-14 · IEC 60127-4

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | UL rec. | VDE | Marking | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|---------|-----|---------|-----------------|------|
| 0.500 | 152 000.0.500 | 415 | 0.0009 | 50 | 640 | ✓ | ✓ | F | 0.01 | 1000 |
| 0.630 | 152 000.0.630 | 334 | 0.0014 | 50 | 400 | ✓ | ✓ | CT | 0.01 | 1000 |
| 0.750 | 152 000.0.750 | 278 | 0.002 | 50 | 280 | ✓ | ✓ | G | 0.01 | 1000 |
| 0.800 | 152 000.0.800 | 243 | 0.0023 | 50 | 230 | ✓ | ✓ | CV | 0.01 | 1000 |
| 1 | 152 000.1 | 220 | 0.0028 | 50 | 170 | ✓ | ✓ | H | 0.01 | 1000 |
| 1.25 | 152 000.1.25 | 182 | 0.0039 | 50 | 110 | ✓ | ✓ | J | 0.01 | 1000 |
| 1.5 | 152 000.1.5 | 169 | 0.0059 | 50 | 85 | ✓ | ✓ | K | 0.01 | 1000 |
| 1.6 | 152 000.1.6 | 160 | 0.0065 | 50 | 76 | ✓ | ✓ | EF | 0.01 | 1000 |
| 1.75 | 152 000.1.75 | 167 | 0.0077 | 50 | 72 | ✓ | ✓ | L | 0.01 | 1000 |
| 2 | 152 000.2 | 170 | 0.0101 | 50 | 65 | ✓ | ✓ | N | 0.01 | 1000 |
| 2.5 | 152 000.2.5 | 150 | 0.0157 | 50 | 45 | ✓ | ✓ | O | 0.01 | 1000 |
| 3 | 152 000.3 | 140 | 0.0227 | 50 | 32 | ✓ | ✓ | P | 0.01 | 1000 |
| 3.15 | 152 000.3.15 | 135 | 0.025 | 50 | 29 | ✓ | ✓ | EL | 0.01 | 1000 |
| 3.5 | 152 000.3.5 | 135 | 0.0308 | 50 | 28 | ✓ | ✓ | R | 0.01 | 1000 |
| 4 | 152 000.4 | 142 | 0.0403 | 50 | 23 | ✓ | ✓ | S | 0.01 | 1000 |

Dimensions


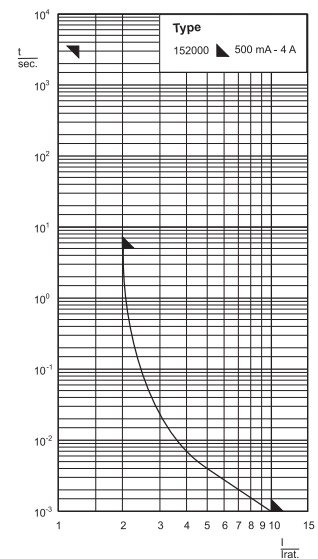
| | |
|----------------|--------------------|
| H | 0,45 +0,1/-0,05 mm |
| L | 1,55 ±0,05 mm |
| W | 0,85 ±0,1 mm |
| W _T | > 75 % of W |
| T ₁ | 0,3 +0,15/-0,2 mm |
| T ₂ | 0,3 +0,15/-0,2 mm |

Recommended pad layout

Reflow soldering

| | |
|---|---------|
| G | 0,5 mm |
| Y | 0,95 mm |
| X | 0,95 mm |
| Z | 2,4 mm |

Wave soldering

| | |
|---|--------|
| G | 0,5 mm |
| Y | 1,2 mm |
| X | 1,1 mm |
| Z | 2,9 mm |

152.000

Pre-Arcing Time Limits

| Rated Current | 1.25 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|---------------------|--------------------|---------------------|------------------|-------------------|
| 500 mA | > 1 h | < 5 s | - | - | < 1 ms |
| 4 A | | | | | |



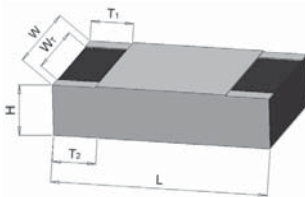
SMD Fuses

FF

Size **0803** Rated Voltage **32 V** **Very Quick Acting** Standard **UL 248-14 · IEC 60127-4**

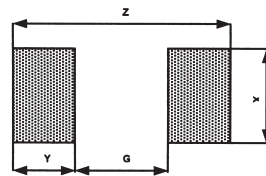
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | UL rec. | Marking | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|---------|---------|-----------------|-------|
| 0.500 | 153 000.0.500 | 430 | 0.0009 | 50 | 660 | ✓ | F | 0.01 | 1 000 |
| 0.630 | 153 000.0.630 | 350 | 0.0014 | 50 | 420 | ✓ | CT | 0.01 | 1 000 |
| 0.750 | 153 000.0.750 | 297 | 0.0021 | 50 | 300 | ✓ | G | 0.01 | 1 000 |
| 0.800 | 153 000.0.800 | 259 | 0.0023 | 50 | 245 | ✓ | CV | 0.01 | 1 000 |
| 1 | 153 000.1 | 240 | 0.0028 | 50 | 185 | ✓ | H | 0.01 | 1 000 |
| 1.25 | 153 00.1.25 | 210 | 0.004 | 50 | 125 | ✓ | J | 0.01 | 1 000 |
| 1.5 | 153 000.1.5 | 180 | 0.0059 | 50 | 90 | ✓ | K | 0.01 | 1 000 |
| 1.6 | 153 000.1.6 | 175 | 0.0065 | 50 | 78 | ✓ | EF | 0.01 | 1 000 |
| 1.75 | 153 000.1.75 | 174 | 0.0077 | 50 | 74 | ✓ | L | 0.01 | 1 000 |
| 2 | 153 000.2 | 173 | 0.0101 | 50 | 67 | ✓ | N | 0.01 | 1 000 |
| 2.5 | 153 000.2.5 | 159 | 0.0157 | 50 | 47 | ✓ | O | 0.01 | 1 000 |
| 3 | 153 000.3 | 149 | 0.0227 | 50 | 34 | ✓ | P | 0.01 | 1 000 |
| 3.15 | 153 000.3.15 | 145 | 0.025 | 50 | 31 | ✓ | EL | 0.01 | 1 000 |
| 3.5 | 153 000.3.5 | 144 | 0.0308 | 50 | 27 | ✓ | R | 0.01 | 1 000 |
| 4 | 153 000.4 | 145 | 0.0403 | 50 | 24 | ✓ | S | 0.01 | 1 000 |

Dimensions



- H 0,45 +0,1/-0,05 mm
- L 2,0 ±0,1 mm
- W 1,25 ±0,15 mm
- W_T > 75 % of W
- T₁ 0,4 +0,1/-0,2 mm
- T₂ 0,4 +0,1/-0,2 mm

Recommended pad layout



Reflow soldering

- G 0,65 mm
- Y 1,1 mm
- X 1,4 mm
- Z 2,85 mm

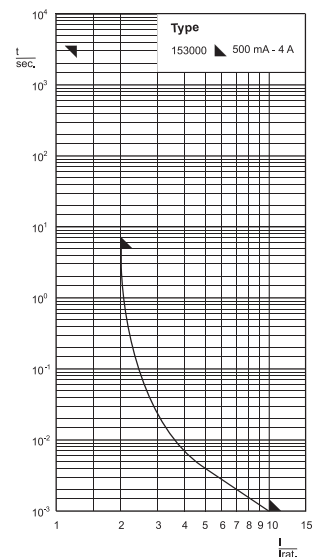
Wave soldering

- G 0,65 mm
- Y 1,4 mm
- X 1,5 mm
- Z 3,45 mm

Pre-Arcing Time Limits

| Rated Current | 1.25 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|--------------------|---------------------|--------------------|---------------------|------------------|-------------------|
| 500 mA ▼ 4 A | > 1 h | < 5 s | - | - | < 1 ms |

153.000





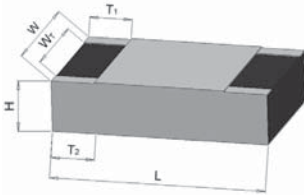
SMD Fuses

FF

Size **1206** Rated Voltage **DC 63 V / AC 125 V** Very Quick Acting Standard **UL 248-14 · IEC 60127-4**

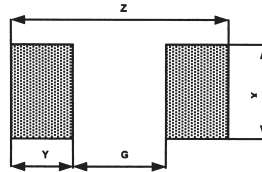
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | UL rec. VDE | Marking | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|-------------|---------|-----------------|-------|
| 0.250 | 154 000.0.250 | 310 | 0.0001 | 50/100 | 880 | listed | | 0.01 | 1 000 |
| 0.375 | 154 000.0.375 | 260 | 0.0004 | 50/100 | 470 | listed | | 0.01 | 1 000 |
| 0.500 | 154 000.0.500 | 440 | 0.0009 | 50 | 670 | ✓ ✓ | F | 0.01 | 1 000 |
| 0.630 | 154 000.0.630 | 366 | 0.0014 | 50 | 440 | ✓ | CT | 0.01 | 1 000 |
| 0.750 | 154 000.0.750 | 327 | 0.0022 | 50 | 330 | ✓ | G | 0.01 | 1 000 |
| 0.800 | 154 000.0.800 | 290 | 0.0023 | 50 | 260 | ✓ | CV | 0.01 | 1 000 |
| 1 | 154 000.1 | 264 | 0.0028 | 50 | 200 | ✓ ✓ | H | 0.01 | 1 000 |
| 1.25 | 154 000.1.25 | 231 | 0.0041 | 50 | 140 | ✓ | J | 0.01 | 1 000 |
| 1.5 | 154 000.1.5 | 208 | 0.0059 | 50 | 105 | ✓ | K | 0.01 | 1 000 |
| 1.6 | 154 000.1.6 | 180 | 0.0066 | 50 | 80 | ✓ ✓ | EF | 0.01 | 1 000 |
| 1.75 | 154 000.1.75 | 176 | 0.0077 | 50 | 76 | ✓ | L | 0.01 | 1 000 |
| 2 | 154 000.2 | 182 | 0.0102 | 50 | 68 | ✓ ✓ | N | 0.01 | 1 000 |
| 2.5 | 154 000.2.5 | 162 | 0.0159 | 50 | 49 | ✓ | O | 0.01 | 1 000 |
| 3 | 154 000.3 | 143 | 0.0229 | 50 | 36 | ✓ | P | 0.01 | 1 000 |
| 3.15 | 154 000.3.15 | 137 | 0.0251 | 50 | 33 | ✓ ✓ | EL | 0.01 | 1 000 |
| 3.5 | 154 000.3.5 | 129 | 0.031 | 50 | 30 | ✓ | R | 0.01 | 1 000 |
| 4 | 154 000.4 | 132 | 0.0404 | 50 | 28 | ✓ | S | 0.01 | 1 000 |
| 5 | 154 000.5 | 180 | 0.0631 | 50 | 24 | ✓ | T | 0.01 | 1 000 |

Dimensions



- H 0,55 ±0,1 mm
- L 3,2 +0,1/-0,2 mm
- W 1,6 ±0,15 mm
- W_T > 75 % of W
- T₁ 0,5 ±0,25 mm
- T₂ 0,5 ±0,25 mm

Recommended pad layout



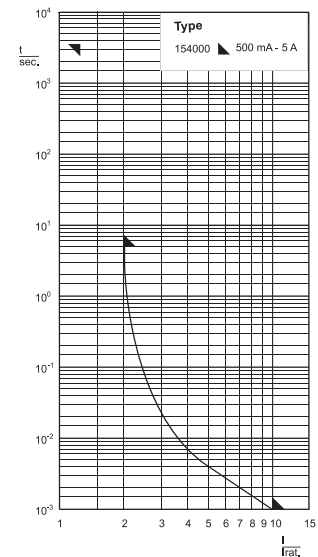
Reflow soldering

- G 1,5 mm
- Y 1,25 mm
- X 1,75 mm
- Z 4,0 mm

Wave soldering

- G 1,5 mm
- Y 1,6 mm
- X 1,9 mm
- Z 4,7 mm

154.000



Pre-Arcing Time Limits

| Rated Current | 1.0 I _n | 1.25 I _n | 2.0 I _n | 3 I _n | 10 I _n |
|---------------|--------------------|---------------------|--------------------|------------------|-------------------|
| 250 mA | > 1 h | - | < 5 s | < 0.2 s | |
| 375 mA | | | | | |
| 500 mA | | < 1 h | < 5 s | - | < 1 ms |
| 5 A | | | | | |



G

SMD Fuses

F

SMD Standard
 Rated Voltage **125 V** Fast Acting UL 248-14 · CSA C22.2 No. 248.14

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | cURus | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|-------|-----------------|------|
| 0.062 | 157 000.0.062 | 600 | 0.00019 | 50 | 5 500 | ✓ | 0.015 | 100 |
| 0.080 | 157 000.0.080 | 550 | 0.00033 | 50 | 4 050 | ✓ | 0.015 | 100 |
| 0.100 | 157 000.0.100 | 350 | 0.0014 | 50 | 2 000 | ✓ | 0.015 | 100 |
| 0.125 | 157 000.0.125 | 240 | 0.0028 | 50 | 1 500 | ✓ | 0.015 | 100 |
| 0.160 | 157 000.0.160 | 350 | 0.0031 | 50 | 1 400 | ✓ | 0.015 | 100 |
| 0.200 | 157 000.0.200 | 250 | 0.0066 | 50 | 800 | ✓ | 0.015 | 100 |
| 0.250 | 157 000.0.250 | 230 | 0.011 | 50 | 600 | ✓ | 0.015 | 100 |
| 0.315 | 157 000.0.315 | 210 | 0.023 | 50 | 420 | ✓ | 0.015 | 100 |
| 0.375 | 157 000.0.375 | 180 | 0.043 | 50 | 300 | ✓ | 0.015 | 100 |
| 0.400 | 157 000.0.400 | 180 | 0.048 | 50 | 290 | ✓ | 0.015 | 100 |
| 0.500 | 157 000.0.500 | 180 | 0.073 | 50 | 230 | ✓ | 0.015 | 100 |
| 0.630 | 157 000.0.630 | 180 | 0.12 | 50 | 190 | ✓ | 0.015 | 100 |
| 0.750 | 157 000.0.750 | 170 | 0.18 | 50 | 160 | ✓ | 0.015 | 100 |
| 0.800 | 157 000.0.800 | 160 | 0.26 | 50 | 130 | ✓ | 0.015 | 100 |
| 1 | 157 000.1 | 150 | 0.45 | 50 | 100 | ✓ | 0.015 | 100 |
| 1.25 | 157 000.1.25 | 150 | 0.68 | 50 | 78 | ✓ | 0.015 | 100 |
| 1.5 | 157 000.1.5 | 150 | 0.85 | 50 | 63 | ✓ | 0.015 | 100 |
| 1.6 | 157 000.1.6 | 140 | 1.05 | 50 | 58 | ✓ | 0.015 | 100 |
| 2 | 157 000.2 | 100 | 0.57 | 50 | 37 | ✓ | 0.015 | 100 |
| 2.5 | 157 000.2.5 | 100 | 1.1 | 50 | 28 | ✓ | 0.015 | 100 |
| 3 | 157 000.3 | 100 | 1.5 | 50 | 23 | ✓ | 0.015 | 100 |
| 3.15 | 157 000.3.15 | 100 | 1.9 | 50 | 21 | ✓ | 0.015 | 100 |
| 3.5 | 157 000.3.5 | 100 | 2.5 | 50 | 19 | ✓ | 0.015 | 100 |
| 4 | 157 000.4 | 100 | 3.3 | 50 | 16 | ✓ | 0.015 | 100 |
| 5 | 157 000.5 | 90 | 6.2 | 50 | 12.5 | ✓ | 0.015 | 100 |
| 6.3 | 157 000.6.3 | 90 | 9.1 | 50 | 10 | ✓ | 0.015 | 100 |
| 7 | 157 000.7 | 90 | 11 | 50 | 8.6 | ✓ | 0.015 | 100 |

1000 pcs. on tape Part No. 157 000 GT

SMD Standard
 Rated Voltage **65 V** Fast Acting UL 248-14 · CSA C22.2 No. 248.14

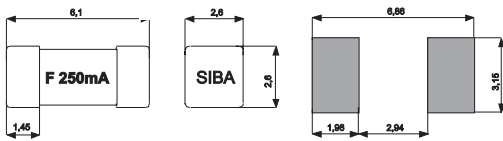
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | cURus | Weight [kg/100] | Pack |
|-------------------|------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|-------|-----------------|------|
| 10 | 157 000.10 | 90 | 27 | 50 | 5.9 | ✓ | 0.015 | 100 |
| 12 | 157 000.12 | 90 | 45 | 50 | 4.9 | ✓ | 0.015 | 100 |
| 15 | 157 000.15 | 90 | 81 | 50 | 3.8 | ✓ | 0.015 | 100 |

1000 pcs. on tape Part No. 157 000 GT

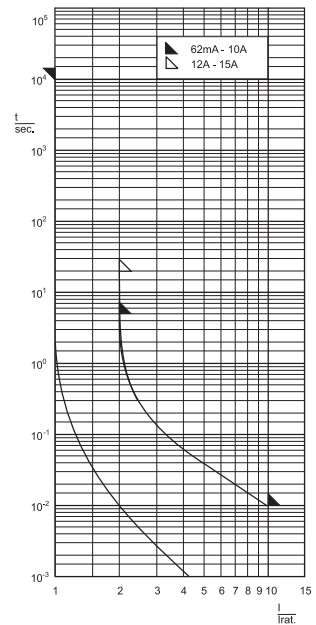


SMD Fuses

F



157.000



Pre-Arcing Time Limits

| Rated Current | 1.0 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|--------------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 62 mA ▼ 10 A | > 4 h | < 5 s | - | - | < 10 ms |
| 12 A ▼ 15 A | | < 20 s | - | - | < 10 ms |



G

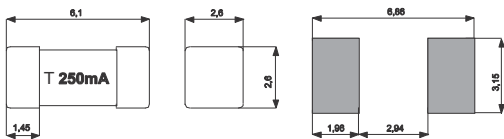
SMD Fuses

T

SMD Rated Voltage **125 V** Time Lag Standard **UL 248-14 · CSA C22.2 No. 248.14**

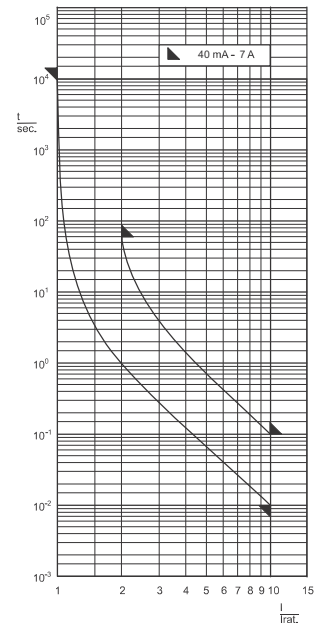
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | cURus | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|-------|-----------------|------|
| 0.250 | 158 000.0.250 | 280 | 0.08 | 50 | 900 | ✓ | 0.015 | 100 |
| 0.315 | 158 000.0.315 | 260 | 0.16 | 50 | 700 | ✓ | 0.015 | 100 |
| 0.375 | 158 000.0.375 | 230 | 0.30 | 50 | 500 | ✓ | 0.015 | 100 |
| 0.400 | 158 000.0.400 | 220 | 0.32 | 50 | 450 | ✓ | 0.015 | 100 |
| 0.500 | 158 000.0.500 | 200 | 0.7 | 50 | 300 | ✓ | 0.015 | 100 |
| 0.630 | 158 000.0.630 | 200 | 0.8 | 50 | 200 | ✓ | 0.015 | 100 |
| 0.750 | 158 000.0.750 | 190 | 1.2 | 50 | 170 | ✓ | 0.015 | 100 |
| 0.800 | 158 000.0.800 | 170 | 1.4 | 50 | 140 | ✓ | 0.015 | 100 |
| 1 | 158 000.1 | 150 | 2.5 | 50 | 120 | ✓ | 0.015 | 100 |
| 1.25 | 158 000.1.25 | 150 | 4.0 | 50 | 90 | ✓ | 0.015 | 100 |
| 1.5 | 158 000.1.5 | 130 | 4.5 | 50 | 60 | ✓ | 0.015 | 100 |
| 1.6 | 158 000.1.6 | 130 | 5 | 50 | 55 | ✓ | 0.015 | 100 |
| 2 | 158 000.2 | 120 | 8 | 50 | 45 | ✓ | 0.015 | 100 |
| 2.5 | 158 000.2.5 | 120 | 15 | 50 | 30 | ✓ | 0.015 | 100 |
| 3 | 158 000.3 | 110 | 22 | 50 | 23 | ✓ | 0.015 | 100 |
| 3.15 | 158 000.3.15 | 100 | 23 | 50 | 20 | ✓ | 0.015 | 100 |
| 3.5 | 158 000.3.5 | 100 | 30 | 50 | 18 | ✓ | 0.015 | 100 |
| 4 | 158 000.4 | 100 | 40 | 50 | 15 | ✓ | 0.015 | 100 |
| 5 | 158 000.5 | 90 | 60 | 50 | 11 | ✓ | 0.015 | 100 |
| 6.3 | 158 000.6.3 | 80 | 130 | 50 | 8 | ✓ | 0.015 | 100 |
| 7 | 158 000.7 | 90 | 130 | 50 | 8 | ✓ | 0.015 | 100 |

1000 pcs. on tape Part No. 158 000 GT



Pre-Arcing Time Limits

| Rated Current | 1.0 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 250 mA | > 4 h | < 60 s | - | - | 10 ms |
| 7 A | - | - | - | - | 100 ms |





SMD Fuses

T

SMD

 Rated Voltage
250 V

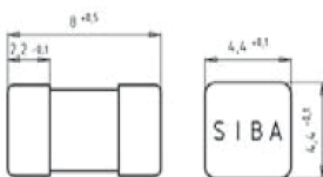
Time Lag

 Standard
DIN VDE 0820-3/4 · IEC 60127-3/4

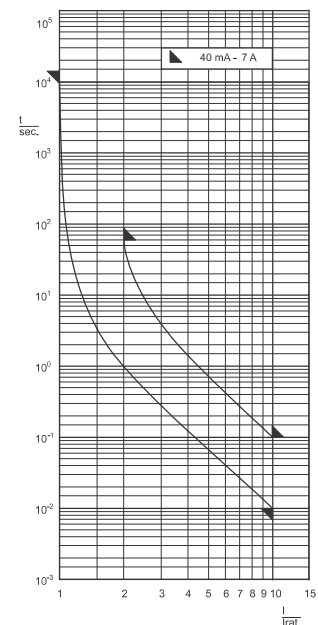
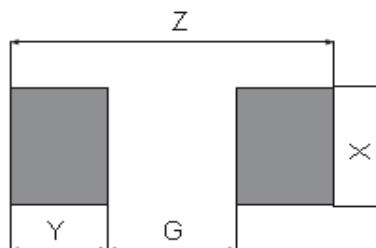
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | cU/R _{US} | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|--------------------|-----------------|------|
| 0.032 | 160 000.0.032 | 1000 | 0.012 | 100 | ✓ | 0.2 | 100 |
| 0.040 | 160 000.0.040 | 860 | 0.015 | 100 | ✓ | 0.2 | 100 |
| 0.050 | 160 000.0.050 | 660 | 0.017 | 100 | ✓ | 0.2 | 100 |
| 0.063 | 160 000.0.063 | 580 | 0.02 | 100 | ✓ | 0.2 | 100 |
| 0.080 | 160 000.0.080 | 480 | 0.035 | 100 | ✓ | 0.2 | 100 |
| 0.100 | 160 000.0.100 | 350 | 0.06 | 100 | ✓ | 0.2 | 100 |
| 0.125 | 160 000.0.125 | 300 | 0.12 | 100 | ✓ | 0.2 | 100 |
| 0.160 | 160 000.0.160 | 280 | 0.21 | 100 | ✓ | 0.2 | 100 |
| 0.200 | 160 000.0.200 | 260 | 0.32 | 100 | ✓ | 0.2 | 100 |
| 0.250 | 160 000.0.250 | 240 | 0.5 | 100 | ✓ | 0.2 | 100 |
| 0.315 | 160 000.0.315 | 220 | 0.8 | 100 | ✓ | 0.2 | 100 |
| 0.400 | 160 000.0.400 | 200 | 1.1 | 100 | ✓ | 0.2 | 100 |
| 0.500 | 160 000.0.500 | 190 | 1.8 | 100 | ✓ | 0.2 | 100 |
| 0.630 | 160 000.0.630 | 180 | 3.2 | 100 | ✓ | 0.2 | 100 |
| 0.800 | 160 000.0.800 | 160 | 5.2 | 100 | ✓ | 0.2 | 100 |
| 1 | 160 000.1 | 140 | 6.8 | 100 | ✓ | 0.2 | 100 |
| 1.25 | 160 000.1.25 | 130 | 12 | 100 | ✓ | 0.2 | 100 |
| 1.6 | 160 000.1.6 | 120 | 22 | 100 | ✓ | 0.2 | 100 |
| 2 | 160 000.2 | 100 | 30 | 100 | ✓ | 0.2 | 100 |
| 2.5 | 160 000.2.5 | 100 | 46 | 100 | ✓ | 0.2 | 100 |
| 3.15 | 160 000.3.15 | 100 | 80 | 100 | ✓ | 0.2 | 100 |
| 4 | 160 000.4 | 100 | 130 | 100 | ✓ | 0.2 | 100 |
| 5 | 160 000.5 | 100 | 130 | 100 | ✓ | 0.2 | 100 |

1000 pcs. on tape Part No. 160 000 GT

Dimensions



Recommended pad layout



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 40 mA | > 1 h | < 2 min. | 400 ms | 150 ms | 20 ms |
| 5 A | | | 10 s | 3 s | 150 ms |

| Soldering | Reflow | Wave |
|-----------|--------|--------|
| G | 3,6 mm | 3,6 mm |
| X | 5,6 mm | 6,8 mm |
| Y | 2,7 mm | 4,2 mm |
| Z | 9 mm | 12 mm |

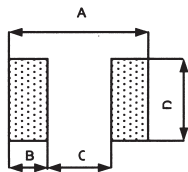
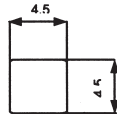
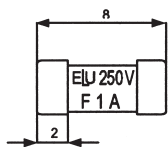


SMD Fuses

F

SMD Rated Voltage **250 V** **Flink Acting** Standard **IEC 60127-3/4**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| 0.500 | 161 000.0.500 | 200 | 0.076 | 100 | 0.3 | 0.2 | 100 |
| 0.630 | 161 000.0.630 | 180 | 0.19 | 100 | 0.3 | 0.2 | 100 |
| 0.800 | 161 00.0.800 | 160 | 0.38 | 100 | 0.3 | 0.2 | 100 |
| 1 | 161 000.1 | 140 | 0.71 | 100 | 0.3 | 0.2 | 100 |
| 1.25 | 161 000.1.25 | 140 | 0.94 | 100 | 0.4 | 0.2 | 100 |
| 1.6 | 161 000.1.6 | 120 | 0.56 | 100 | 0.4 | 0.2 | 100 |
| 2 | 161 000.2 | 110 | 1.1 | 100 | 0.5 | 0.2 | 100 |
| 2.5 | 161 000.2.5 | 100 | 2.0 | 100 | 0.6 | 0.2 | 100 |
| 3.15 | 161 000.3.15 | 100 | 3.2 | 100 | 0.7 | 0.2 | 100 |
| 4 | 161 000.4 | 100 | 5.0 | 100 | 0.9 | 0.2 | 100 |
| 5 | 161 000.5 | 100 | 9.0 | 100 | 1.0 | 0.2 | 100 |
| 6.3 | 161 000.6.3 | 100 | 13 | 100 | 1.4 | 0.2 | 100 |

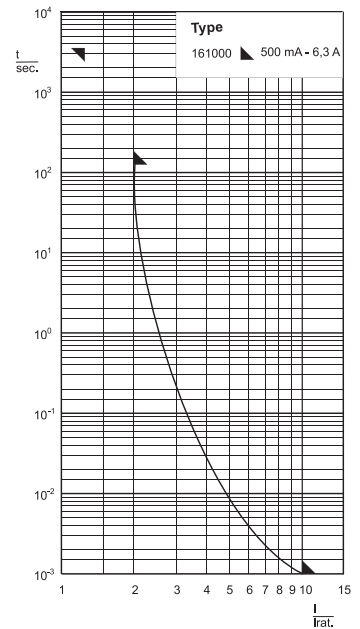


Recommended pad layout

| | Reflow soldering | Wave soldering |
|---|------------------|----------------|
| A | 9 mm | 12 mm |
| B | 2.5 mm | 4 mm |
| C | 4 mm | 4 mm |
| D | 5.6 mm | 6.8 mm |

Pre-Arcing Time Limits

| Rated Current | 1.25 I _n | 2 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|---------------------|------------------|---------------------|------------------|-------------------|
| 500 mA | > 1 h | < 120 s | - | - | 1 ms |
| 6.3 A | | | - | - | 10 ms |





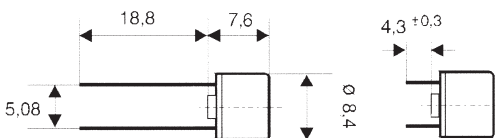
SUB Miniature Fuses

F

KS **Rated Voltage 250 V** **Fast Acting** **DIN VDE 0820-3/3 · IEC 60127-3/3** **Standard**

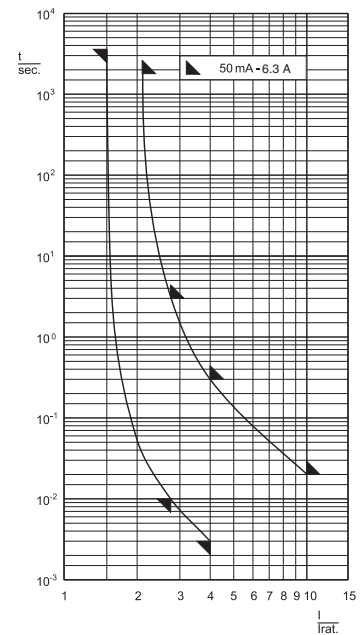
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [mW] | SEMKO | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|------------------------|-------|-----------------|------|
| 0.050 | 164 000.0.050 | 820 | 0.0003 | 35 | 95 | ✓ | 0.1 | 100 |
| 0.063 | 164 0000.063 | 750 | 0.0007 | 35 | 110 | ✓ | 0.1 | 100 |
| 0.080 | 164 000.0.80 | 630 | 0.0015 | 35 | 120 | ✓ | 0.1 | 100 |
| 0.100 | 164 000.0.100 | 500 | 0.0035 | 35 | 155 | ✓ | 0.1 | 100 |
| 0.125 | 164 000.0.125 | 500 | 0.006 | 35 | 175 | ✓ | 0.1 | 100 |
| 0.160 | 164 000.0.160 | 460 | 0.011 | 35 | 210 | ✓ | 0.1 | 100 |
| 0.200 | 164 000.0.200 | 150 | 0.018 | 35 | 80 | ✓ | 0.1 | 100 |
| 0.250 | 164 000.0.250 | 140 | 0.035 | 35 | 90 | ✓ | 0.1 | 100 |
| 0.315 | 164 000.0.315 | 130 | 0.05 | 35 | 120 | ✓ | 0.1 | 100 |
| 0.400 | 164 000.0.400 | 120 | 0.10 | 35 | 140 | ✓ | 0.1 | 100 |
| 0.500 | 164 000.0.500 | 110 | 0.18 | 35 | 160 | ✓ | 0.1 | 100 |
| 0.630 | 164 000.0.630 | 100 | 0.33 | 35 | 180 | ✓ | 0.1 | 100 |
| 0.800 | 164 000.0.800 | 90 | 0.14 | 35 | 200 | ✓ | 0.1 | 100 |
| 1 | 164 000.1 | 80 | 0.24 | 35 | 220 | ✓ | 0.1 | 100 |
| 1.25 | 164 000.1.25 | 75 | 0.35 | 35 | 260 | ✓ | 0.1 | 100 |
| 1.6 | 164 000.1.6 | 70 | 0.6 | 35 | 280 | ✓ | 0.1 | 100 |
| 2 | 164 000.2 | 60 | 1.2 | 35 | 340 | ✓ | 0.1 | 100 |
| 2.5 | 164 000.2.5 | 60 | 2.0 | 35 | 420 | ✓ | 0.1 | 100 |
| 3.15 | 164 000.3.15 | 60 | 3.5 | 35 | 580 | ✓ | 0.1 | 100 |
| 4 | 164 000.4 | 60 | 6.2 | 40 | 700 | ✓ | 0.1 | 100 |
| 5 | 164 000.5 | 60 | 13 | 50 | 900 | ✓ | 0.1 | 100 |
| 6.3 | 164 000.6.3 | 60 | 19 | 63 | 1 100 | ✓ | 0.1 | 100 |

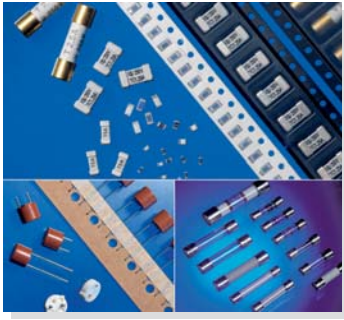
short pins (4.3 mm) Part No. 164 050
1000 pcs. on tape Part No. 164 000 GT



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------------|--------------------|--------------------|---------------------|---------------------|-------------------|
| 50 mA ▼ 6.3 A | > 1 h | < 30 min. | 10 ms ▼ 3 s | 3 ms ▼ 300 ms | < 20 ms |





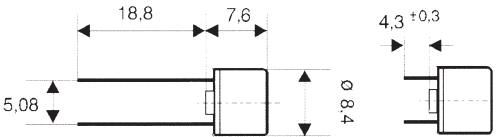
SUB Miniature Fuses

M

KS **Rated Voltage 250 V** **Medium Time Lag** **Standard IEC 60127-3**

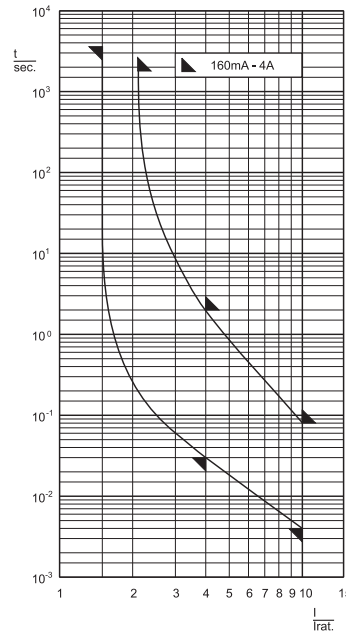
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² ts-value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [mW] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-------------------------------------------------------|-----------------------------|------------------------|-----------------|------|
| 0.160 | 165 000.0.160 | 325 | 0.075 | 35 | 140 | 0.1 | 100 |
| 0.200 | 165 000.0.200 | 120 | 0.020 | 35 | 80 | 0.1 | 100 |
| 0.250 | 165 000.0.250 | 120 | 0.036 | 35 | 90 | 0.1 | 100 |
| 0.315 | 165 000.0.315 | 120 | 0.055 | 35 | 120 | 0.1 | 100 |
| 0.400 | 165 000.0.400 | 110 | 0.11 | 35 | 140 | 0.1 | 100 |
| 0.500 | 165 000.0.500 | 100 | 0.20 | 35 | 160 | 0.1 | 100 |
| 0.630 | 165 000.0.630 | 90 | 0.33 | 35 | 180 | 0.1 | 100 |
| 0.800 | 165 000.0.800 | 80 | 0.58 | 35 | 140 | 0.1 | 100 |
| 1 | 165 000.1 | 70 | 0.9 | 35 | 160 | 0.1 | 100 |
| 1.25 | 165 000.1.25 | 65 | 1.4 | 35 | 190 | 0.1 | 100 |
| 1.6 | 165 000.1.6 | 65 | 2.5 | 35 | 200 | 0.1 | 100 |
| 2 | 165 000.2 | 60 | 3.1 | 35 | 350 | 0.1 | 100 |
| 2.5 | 165 000.2.5 | 55 | 5.2 | 35 | 380 | 0.1 | 100 |
| 3.15 | 165 000.3.15 | 55 | 9.9 | 35 | 510 | 0.1 | 100 |
| 4 | 165 000.4 | 50 | 16 | 40 | 550 | 0.1 | 100 |

short pins (4.3 mm) Part No. 165 050
 1000 pcs. on tape Part No. 165 000 GT



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 160 mA | > 1 h | < 30 min. | - | 30 ms | 4 ms |
| 4 A | | | | 2 s | 80 ms |





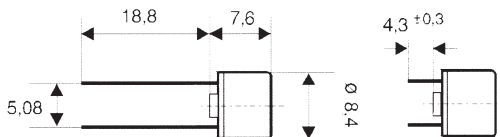
SUB Miniature Fuses

T

KS **Rated Voltage 250 V** **Time Lag** **DIN VDE 0820-3/3 · IEC 60127-3/3** **Standard**

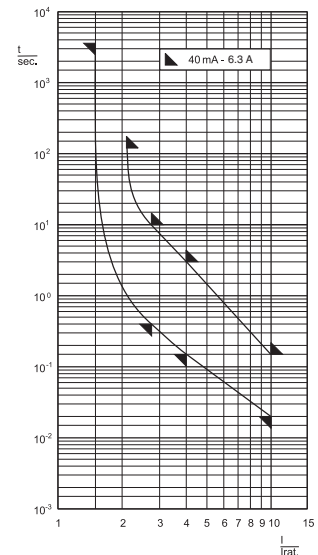
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² ts-value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [mW] | SEMKO VDE cURus | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-------------------------------------------------------|-----------------------------|------------------------|-----------------|-----------------|------|
| 0.040 | 166 000.0.040 | 530 | 0.015 | 35 | 60 | ✓✓✓ | 0.1 | 100 |
| 0.050 | 166 000.0.050 | 490 | 0.017 | 35 | 70 | ✓✓✓ | 0.1 | 100 |
| 0.063 | 166 000.0.063 | 390 | 0.02 | 35 | 80 | ✓✓✓ | 0.1 | 100 |
| 0.080 | 166 000.0.080 | 300 | 0.035 | 35 | 90 | ✓✓✓ | 0.1 | 100 |
| 0.100 | 166 000.0.100 | 260 | 0.06 | 35 | 100 | ✓✓✓ | 0.1 | 100 |
| 0.125 | 166 000.0.125 | 180 | 0.12 | 35 | 110 | ✓✓✓ | 0.1 | 100 |
| 0.160 | 166 000.0.160 | 170 | 0.21 | 35 | 130 | ✓✓✓ | 0.1 | 100 |
| 0.200 | 166 000.0.200 | 160 | 0.32 | 35 | 140 | ✓✓✓ | 0.1 | 100 |
| 0.250 | 166 000.0.250 | 150 | 0.5 | 35 | 150 | ✓✓✓ | 0.1 | 100 |
| 0.315 | 166 000.0.315 | 140 | 0.8 | 35 | 160 | ✓✓✓ | 0.1 | 100 |
| 0.400 | 166 000.0.400 | 130 | 1.1 | 35 | 170 | ✓✓✓ | 0.1 | 100 |
| 0.500 | 166 000.0.500 | 120 | 1.8 | 35 | 180 | ✓✓✓ | 0.1 | 100 |
| 0.630 | 166 000.0.630 | 110 | 3.2 | 35 | 200 | ✓✓✓ | 0.1 | 100 |
| 0.800 | 166 000.0.800 | 100 | 5.2 | 35 | 220 | ✓✓✓ | 0.1 | 100 |
| 1 | 166 000.1 | 85 | 8 | 35 | 240 | ✓✓✓ | 0.1 | 100 |
| 1.25 | 166 000.1.25 | 75 | 12 | 35 | 290 | ✓✓✓ | 0.1 | 100 |
| 1.6 | 166 000.1.6 | 70 | 22 | 35 | 350 | ✓✓✓ | 0.1 | 100 |
| 2 | 166 000.2 | 70 | 30 | 35 | 480 | ✓✓✓ | 0.1 | 100 |
| 2.5 | 166 000.2.5 | 70 | 46 | 35 | 520 | ✓✓✓ | 0.1 | 100 |
| 3.15 | 166 000.3.15 | 70 | 80 | 35 | 600 | ✓✓✓ | 0.1 | 100 |
| 4 | 166 000.4 | 70 | 130 | 40 | 800 | ✓✓✓ | 0.1 | 100 |
| 5 | 166 000.5 | 70 | 130 | 50 | 1 000 | ✓✓✓ | 0.1 | 100 |
| 6.3 | 166 000.6.3 | 70 | 230 | 63 | 1 200 | ✓✓✓ | 0.1 | 100 |

short pins (4.3 mm) Part No. 166 050
1000 pcs. on tape Part No. 166 000 GT



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 40 mA | > 1 h | < 2 min. | 400 ms | 150 ms | 20 ms |
| 6.3 A | | | 10 s | 3 s | 150 ms |





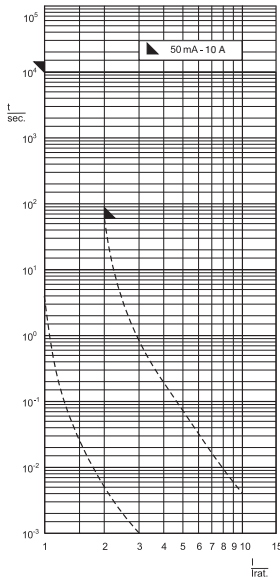
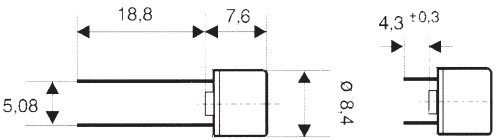
SUB Miniature Fuses

F

KS Rated Voltage **250 V** **Fast Acting** **UL 248-14 · CSA C22.2 No. 248.14** Standard

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [mW] | ± | ± | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|------------------------|---|---|-----------------|------|
| 0.050 | 164 500.0.050 | 1 500 | 0.0002 | 50 | 75 | ✓ | ✓ | 0.1 | 100 |
| 0.063 | 164 5000.063 | 1 350 | 0.0003 | 50 | 85 | ✓ | ✓ | 0.1 | 100 |
| 0.080 | 164 5000.080 | 1 200 | 0.0007 | 50 | 95 | ✓ | ✓ | 0.1 | 100 |
| 0.100 | 164 500.0.100 | 1 100 | 0.0015 | 50 | 110 | ✓ | ✓ | 0.1 | 100 |
| 0.125 | 164 500.0.125 | 1 000 | 0.0030 | 50 | 125 | ✓ | ✓ | 0.1 | 100 |
| 0.160 | 164 500.0.160 | 950 | 0.0075 | 50 | 155 | ✓ | ✓ | 0.1 | 100 |
| 0.200 | 164 500.0.200 | 850 | 0.013 | 50 | 170 | ✓ | ✓ | 0.1 | 100 |
| 0.250 | 164 500.0.250 | 240 | 0.020 | 50 | 60 | ✓ | ✓ | 0.1 | 100 |
| 0.315 | 164 500.0.315 | 230 | 0.030 | 50 | 75 | ✓ | ✓ | 0.1 | 100 |
| 0.400 | 164 500.0.400 | 220 | 0.055 | 50 | 90 | ✓ | ✓ | 0.1 | 100 |
| 0.500 | 164 500.0.500 | 210 | 0.10 | 50 | 105 | ✓ | ✓ | 0.1 | 100 |
| 0.630 | 164 500.0.630 | 200 | 0.19 | 50 | 130 | ✓ | ✓ | 0.1 | 100 |
| 0.800 | 164 500.0.800 | 190 | 0.36 | 50 | 155 | ✓ | ✓ | 0.1 | 100 |
| 1 | 164 500.1 | 180 | 0.14 | 50 | 180 | ✓ | ✓ | 0.1 | 100 |
| 1.25 | 164 500.1.25 | 170 | 0.24 | 50 | 215 | ✓ | ✓ | 0.1 | 100 |
| 1.6 | 164 500.1.6 | 160 | 0.34 | 50 | 260 | ✓ | ✓ | 0.1 | 100 |
| 2 | 164 500.2 | 150 | 0.56 | 50 | 300 | ✓ | ✓ | 0.1 | 100 |
| 2.5 | 164 500.2.5 | 140 | 1.1 | 50 | 350 | ✓ | ✓ | 0.1 | 100 |
| 3.15 | 164 500.3.15 | 130 | 2.0 | 50 | 410 | ✓ | ✓ | 0.1 | 100 |
| 4 | 164 500.4 | 120 | 3.2 | 50 | 480 | ✓ | ✓ | 0.1 | 100 |
| 5 | 164 500.5 | 110 | 6.2 | 50 | 550 | ✓ | ✓ | 0.1 | 100 |
| 6.3 | 164 500.6.3 | 100 | 14 | 50 | 630 | ✓ | ✓ | 0.1 | 100 |
| 8 | 164 500.8 | 90 | 24 | 50 | 720 | ✓ | ✓ | 0.1 | 100 |
| 10 | 164 500.10 | 90 | 40 | 50 | 900 | ✓ | ✓ | 0.1 | 100 |

short pins (4.3 mm) Part No. 164 550
 1000 pcs. on tape Part No. 164 500 GT



Pre-Arcing Time Limits

| Rated Current | 1.0 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 50 mA | > 4 h | < 60 s | - | - | - |
| 10 A | | | | | |

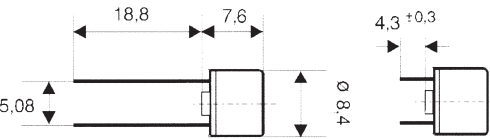


SUB Miniature Fuses **T**

KS Rated Voltage **250 V** Time Lag Standard **UL 248-14 · CSA C22.2 No. 248.14**

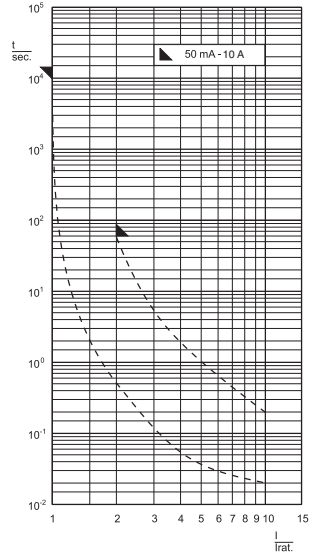
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [mW] | 5 | eUL | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|------------------------|---|-----|-----------------|------|
| 0.050 | 166 500.0.050 | 800 | 0.015 | 50 | 50 | ✓ | ✓ | 0.1 | 100 |
| 0.063 | 166 500.0.063 | 700 | 0.017 | 50 | 50 | ✓ | ✓ | 0.1 | 100 |
| 0.080 | 166 500.0.080 | 600 | 0.020 | 50 | 50 | ✓ | ✓ | 0.1 | 100 |
| 0.100 | 166 500.0.100 | 550 | 0.025 | 50 | 55 | ✓ | ✓ | 0.1 | 100 |
| 0.125 | 166 500.0.125 | 500 | 0.03 | 50 | 65 | ✓ | ✓ | 0.1 | 100 |
| 0.160 | 166 500.0.160 | 450 | 0.07 | 50 | 75 | ✓ | ✓ | 0.1 | 100 |
| 0.200 | 166 500.0.200 | 400 | 0.14 | 5 | 80 | ✓ | ✓ | 0.1 | 100 |
| 0.250 | 166 500.0.250 | 370 | 0.25 | 5 | 95 | ✓ | ✓ | 0.1 | 100 |
| 0.315 | 166 500.0.315 | 340 | 0.42 | 50 | 110 | ✓ | ✓ | 0.1 | 100 |
| 0.400 | 166 500.0.400 | 310 | 0.53 | 50 | 130 | ✓ | ✓ | 0.1 | 100 |
| 0.500 | 166 500.0.500 | 270 | 1.0 | 50 | 140 | ✓ | ✓ | 0.1 | 100 |
| 0.630 | 166 500.0.630 | 230 | 1.5 | 50 | 150 | ✓ | ✓ | 0.1 | 100 |
| 0.800 | 166 500.0.800 | 220 | 3.1 | 50 | 180 | ✓ | ✓ | 0.1 | 100 |
| 1 | 166 500.1 | 200 | 4.8 | 50 | 200 | ✓ | ✓ | 0.1 | 100 |
| 1.25 | 166 500.1.25 | 120 | 5.7 | 50 | 150 | ✓ | ✓ | 0.1 | 100 |
| 1.6 | 166 500.1.6 | 120 | 11 | 50 | 190 | ✓ | ✓ | 0.1 | 100 |
| 2 | 166 500.2 | 115 | 18 | 50 | 230 | ✓ | ✓ | 0.1 | 100 |
| 2.5 | 166 500.2.5 | 110 | 25 | 50 | 280 | ✓ | ✓ | 0.1 | 100 |
| 3.15 | 166 500.3.15 | 100 | 40 | 50 | 320 | ✓ | ✓ | 0.1 | 100 |
| 4 | 166 500.4 | 95 | 72 | 50 | 380 | ✓ | ✓ | 0.1 | 100 |
| 5 | 166 500.5 | 90 | 130 | 50 | 450 | ✓ | ✓ | 0.1 | 100 |
| 6.3 | 166 500.6.3 | 90 | 130 | 50 | 570 | ✓ | ✓ | 0.1 | 100 |
| 8 | 166 500.8 | 90 | 230 | 50 | 720 | ✓ | ✓ | 0.1 | 100 |
| 10 | 166 500.10 | 90 | 370 | 50 | 900 | ✓ | ✓ | 0.1 | 100 |

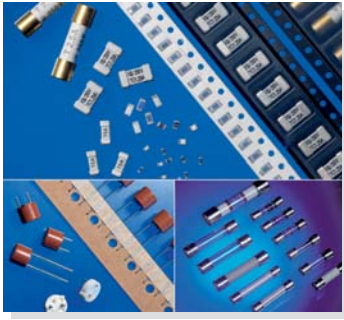
short pins (4.3 mm) Part No. 166 550
1000 pcs. on tape Part No. 166 500 GT



Pre-Arcing Time Limits

| Rated Current | 1.0 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 50 mA | > 4 h | < 60 s | - | - | - |
| 10 A | | | | | |



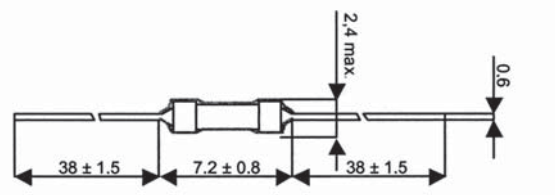


SUB Miniature Fuses

F

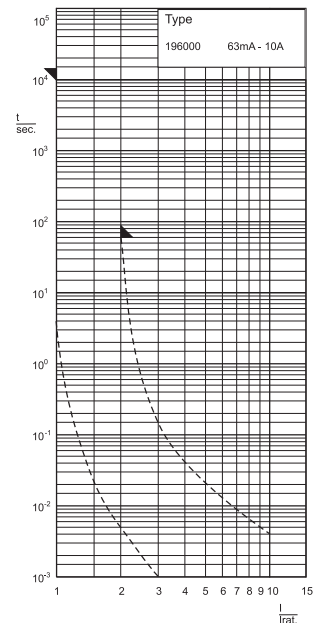
| | | | |
|---------------------------|-------------------------------|---------------------|------------------------------|
| Size 2.3 x 8 mm | Rated Voltage 125 V | Flink Acting | Standard UL 248-14 |
|---------------------------|-------------------------------|---------------------|------------------------------|

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Cold Resistance [mΩ] | ± | tol | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|----------------------|---|-----|-----------------|------|
| 0.063 | 196 000.0.063 | 2 250 | 0.0002 | 50 | 7.21 | ✓ | ✓ | 0.1 | 100 |
| 0.125 | 196 000.0.125 | 1 500 | 0.001 | 50 | 2.78 | ✓ | ✓ | 0.1 | 100 |
| 0.250 | 196 000.0.250 | 1 000 | 0.007 | 50 | 0.60 | ✓ | ✓ | 0.1 | 100 |
| 0.375 | 196 000.0.375 | 1 000 | 0.006 | 50 | 0.40 | ✓ | ✓ | 0.1 | 100 |
| 0.500 | 196 000.0.500 | 1 000 | 0.018 | 50 | 0.27 | ✓ | ✓ | 0.1 | 100 |
| 0.750 | 196 000.0.750 | 275 | 0.04 | 50 | 0.16 | ✓ | ✓ | 0.1 | 100 |
| 1 | 196 000.1 | 275 | 0.094 | 50 | 0.12 | ✓ | ✓ | 0.1 | 100 |
| 1.5 | 196 000.1.5 | 275 | 0.33 | 50 | 0.063 | ✓ | ✓ | 0.1 | 100 |
| 2 | 196 000.2 | 250 | 0.41 | 50 | 0.057 | ✓ | ✓ | 0.1 | 100 |
| 3 | 196 000.3 | 250 | 1.5 | 50 | 0.029 | ✓ | ✓ | 0.1 | 100 |
| 4 | 196 000.4 | 225 | 3.2 | 50 | 0.019 | ✓ | ✓ | 0.1 | 100 |
| 5 | 196 000.5 | 225 | 4.1 | 50 | 0.017 | ✓ | ✓ | 0.1 | 100 |
| 7 | 196 000.7 | 150 | 11 | 50 | 0.013 | ✓ | ✓ | 0.1 | 100 |
| 10 | 196 000.10 | 125 | 30 | 50 | 0.006 | ✓ | ✓ | 0.1 | 100 |



Pre-Arcing Time Limits

| Rated Current | 100% I _n | 135% I _n | 150% I _n | 200% I _n |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| 63 mA ▼ 10 A | < 4 h | - | - | 5 s |





Miniature Fuses

Glass Tube

F

Size
5 x 20 mm

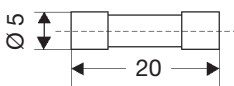
Rated Voltage
250 V

Fast Acting

Standard
DIN VDE 0820-2/2 · IEC 60127-2/2

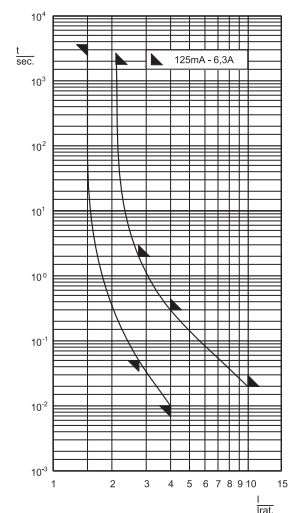
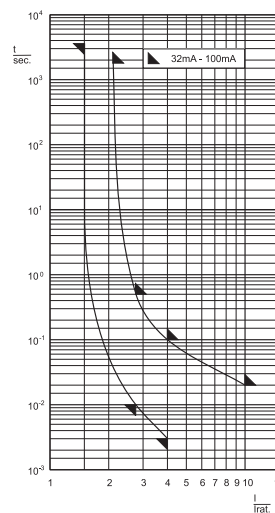
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | SEMKO VDE | BEAB cURus | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------|------------|-----------------|------|
| 0.032 | 179 020.0.032 | 10 000 | 0.0001 | 35 | 0.8 | ✓ | ✓ | 0.1 | 100 |
| 0.040 | 179 020.0.040 | 8 000 | 0.0002 | 35 | 0.8 | ✓ | ✓ | 0.1 | 100 |
| 0.050 | 179 020.0.050 | 3 500 | 0.0004 | 35 | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.063 | 179 020.0.063 | 3 500 | 0.0007 | 35 | 0.5 | ✓ | ✓ | 0.1 | 100 |
| 0.080 | 179 020.0.080 | 2 500 | 0.0017 | 35 | 0.5 | ✓ | ✓ | 0.1 | 100 |
| 0.100 | 179 020.0.100 | 2 200 | 0.0022 | 35 | 0.6 | ✓ | ✓ | 0.1 | 100 |
| 0.125 | 179 020.0.125 | 2 000 | 0.0036 | 35 | 0.6 | ✓ | ✓ | 0.1 | 100 |
| 0.160 | 179 020.0.160 | 1 900 | 0.0085 | 35 | 0.7 | ✓ | ✓ | 0.1 | 100 |
| 0.200 | 179 020.0.200 | 1 400 | 0.018 | 35 | 0.7 | ✓ | ✓ | 0.1 | 100 |
| 0.250 | 179 020.0.250 | 1 300 | 0.047 | 35 | 0.8 | ✓ | ✓ | 0.1 | 100 |
| 0.315 | 179 020.0.315 | 1 200 | 0.067 | 35 | 0.9 | ✓ | ✓ | 0.1 | 100 |
| 0.400 | 179 020.0.400 | 1 100 | 0.14 | 35 | 1.0 | ✓ | ✓ | 0.1 | 100 |
| 0.500 | 179 020.0.500 | 160 | 0.16 | 35 | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.630 | 179 020.0.630 | 140 | 0.39 | 35 | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.800 | 179 020.0.800 | 130 | 0.8 | 35 | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 1 | 179 020.1 | 130 | 1.5 | 35 | 0.5 | ✓ | ✓ | 0.1 | 100 |
| 1.25 | 179 020.1.25 | 120 | 2.0 | 35 | 0.6 | ✓ | ✓ | 0.1 | 100 |
| 1.6 | 179 020.1.6 | 120 | 4.1 | 35 | 0.7 | ✓ | ✓ | 0.1 | 100 |
| 2 | 179 020.2 | 120 | 6.2 | 35 | 0.9 | ✓ | ✓ | 0.1 | 100 |
| 2.5 | 179 020.2.5 | 120 | 11 | 35 | 1.0 | ✓ | ✓ | 0.1 | 100 |
| 3.15 | 179 020.3.15 | 120 | 20 | 35 | 1.2 | ✓ | ✓ | 0.1 | 100 |
| 4 | 179 020.4 | 100 | 25 | 40 | 1.4 | ✓ | ✓ | 0.1 | 100 |
| 5 | 179 020.5 | 100 | 42 | 50 | 1.7 | ✓ | ✓ | 0.1 | 100 |
| 6.3 | 179 020.6.3 | 100 | 79 | 63 | 2.0 | ✓ | ✓ | 0.1 | 100 |
| (8) | 179 020.8 | 100 | 125 | 80 | 2.2 | | | 0.1 | 100 |
| (10) | 179 020.10 | 100 | 220 | 100 | 2.4 | | | 0.1 | 100 |

(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 32 mA | > 1 h | < 30 min. | 10 ms | 3 ms | < 20 ms |
| 100 mA | | | 500 ms | 100 ms | |
| 125 mA | | | 50 ms | 10 ms | |
| 6.3 A | | | 2 s | 300 ms | |





Miniature Fuses

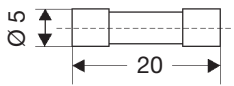
Ceramic Tube

F

Size **5 x 20 mm** Rated Voltage **250 V** **Fast Acting** Standard **DIN VDE 0820-2/1 · IEC 60127-2/1**

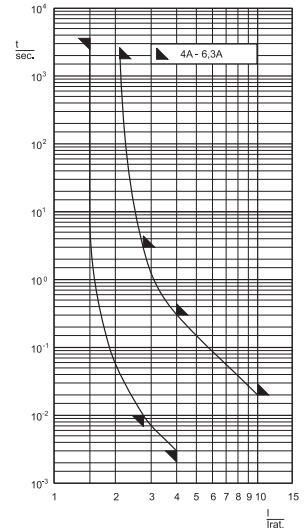
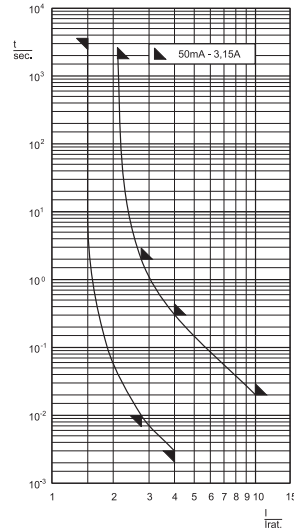
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | SEMKO | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-------|-----------------|------|
| 0.050 | 179 021.0.050 | 4 000 | 0.00022 | 1 500 | 0.5 | | 0.13 | 100 |
| 0.063 | 179 021.0.63 | 3 900 | 0.00037 | 1 500 | 0.6 | | 0.13 | 100 |
| 0.080 | 179 021.0.80 | 3 200 | 0.00073 | 1 500 | 0.7 | | 0.13 | 100 |
| 0.100 | 179 021.0.100 | 2 600 | 0.0011 | 1 500 | 0.8 | | 0.13 | 100 |
| 0.125 | 179 021.0.125 | 2 500 | 0.0018 | 1 500 | 0.9 | | 0.13 | 100 |
| 0.160 | 179 021.0.160 | 1 900 | 0.0034 | 1 500 | 0.9 | | 0.13 | 100 |
| 0.200 | 179 021.0.200 | 1 700 | 0.007 | 1 500 | 1.0 | | 0.13 | 100 |
| 0.250 | 179 021.0.250 | 1 300 | 0.013 | 1 500 | 1.0 | | 0.13 | 100 |
| 0.315 | 179 021.0.315 | 700 | 0.029 | 1 500 | 0.8 | | 0.13 | 100 |
| 0.400 | 179 021.0.400 | 650 | 0.055 | 1 500 | 0.9 | | 0.13 | 100 |
| 0.500 | 179 021.0.500 | 600 | 0.10 | 1 500 | 1.0 | ✓ | 0.13 | 100 |
| 0.630 | 179 021.0.630 | 550 | 0.19 | 1 500 | 1.1 | ✓ | 0.13 | 100 |
| 0.800 | 179 021.0.800 | 500 | 0.16 | 1 500 | 1.3 | ✓ | 0.13 | 100 |
| 1 | 179 021.1 | 450 | 0.28 | 1 500 | 1.4 | ✓ | 0.13 | 100 |
| 1.25 | 179 021.1.25 | 400 | 0.6 | 1 500 | 1.6 | ✓ | 0.13 | 100 |
| 1.6 | 179 021.1.6 | 350 | 1.0 | 1 500 | 1.8 | ✓ | 0.13 | 100 |
| 2 | 179 021.2 | 320 | 1.8 | 1 500 | 2.0 | ✓ | 0.13 | 100 |
| 2.5 | 179 021.2.5 | 270 | 3.0 | 1 500 | 2.1 | ✓ | 0.13 | 100 |
| 3.15 | 179 021.3.15 | 220 | 6.2 | 1 500 | 2.2 | ✓ | 0.13 | 100 |
| 4 | 179 021.4 | 180 | 15 | 1 500 | 2.3 | ✓ | 0.13 | 100 |
| 5 | 179 021.5 | 150 | 31 | 1 500 | 2.4 | ✓ | 0.13 | 100 |
| 6.3 | 179 021.6.3 | 130 | 52 | 1 500 | 2.6 | ✓ | 0.13 | 100 |
| (8) | 179 021.8 | 100 | 110 | 1 500 | 2.8 | | 0.13 | 100 |
| (10) | 179 021.10 | 100 | 200 | 1 500 | 3.0 | | 0.13 | 100 |
| (12.5) | 179 021.12.5 | 100 | 300 | 1 500 | 3.4 | | 0.13 | 100 |
| (16) | 179 021.16 | 100 | 590 | 1 500 | 4.0 | | 0.13 | 100 |

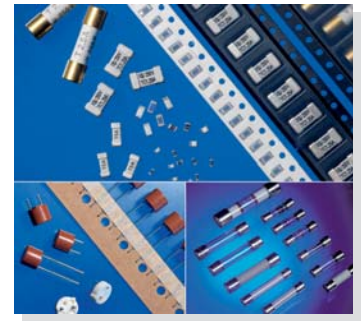
(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 50 mA | > 1 h | < 30 min. | 10 ms | 3 ms | < 20 ms |
| 3.15 A | | | 2 s | | |
| 4 A | | | 10 ms | | |
| 6.3 A | | | 3 s | | |





Miniature Fuses
Glass Tube with Filling

F

Size
5 x 20 mm

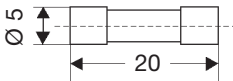
Rated Voltage
250 V

Fast Acting

Standard
DIN 41571 Part 1

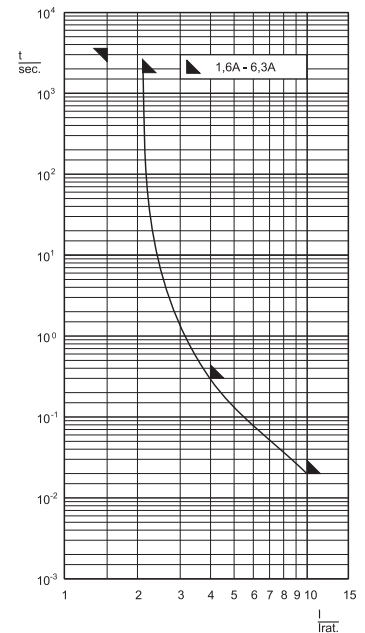
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|--------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| 1.6 | 171 100.1.6 | 480 | 1.1 | 1 000 | 1.3 | 0.13 | 100 |
| 2 | 171 100.2 | 400 | 2 | 1 000 | 1.5 | 0.13 | 100 |
| 2.5 | 171 100.2.5 | 400 | 4 | 1 000 | 1.6 | 0.13 | 100 |
| 3.15 | 171 100.3.15 | 240 | 9 | 1 000 | 1.7 | 0.13 | 100 |
| 4 | 171 100.4 | 240 | 18 | 1 000 | 1.9 | 0.13 | 100 |
| 5 | 171 100.5 | 230 | 32 | 1 000 | 2.3 | 0.13 | 100 |
| 6.3 | 171 100.6.3 | 170 | 52 | 100 | 2.8 | 0.13 | 100 |
| (8) | 171 100.8 | 160 | 100 | 300 | 3.2 | 0.13 | 100 |
| (10) | 171 100.10 | 150 | 200 | 300 | 3.4 | 0.13 | 100 |

(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 1.6 A ▼ 6.3 A | > 1 h | < 30 min. | - | < 300 ms | < 20 ms |





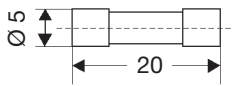
Miniature Fuses
Glass Tube > 1.25 A with Filling

M

Size **5 x 20 mm** Rated Voltage **250 V** Medium Time Lag Standard **DIN 41571 Part 2**

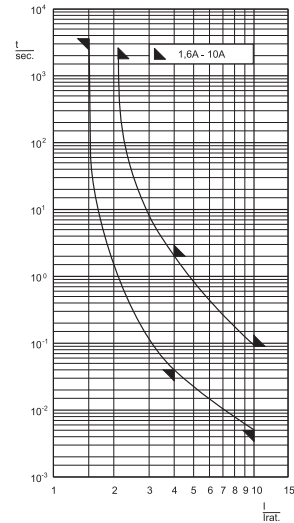
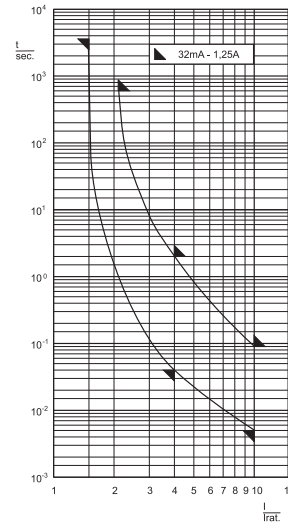
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| 0.032 | 172 000.0.032 | 640 | 0.0055 | 80 | 0.1 | 0.1 | 100 |
| 0.040 | 172 000.0.40 | 630 | 0.008 | 80 | 0.1 | 0.1 | 100 |
| 0.050 | 172 000.0.050 | 600 | 0.017 | 80 | 0.1 | 0.1 | 100 |
| 0.063 | 172 000.0.063 | 560 | 0.025 | 80 | 0.1 | 0.1 | 100 |
| 0.080 | 172 000.0.080 | 520 | 0.040 | 80 | 0.1 | 0.1 | 100 |
| 0.100 | 172 000.0.100 | 470 | 0.055 | 80 | 0.1 | 0.1 | 100 |
| 0.125 | 172 000.0.125 | 420 | 0.011 | 80 | 0.1 | 0.1 | 100 |
| 0.160 | 172 000.0.160 | 370 | 0.036 | 80 | 0.1 | 0.1 | 100 |
| 0.200 | 172 000.0.200 | 320 | 0.05 | 80 | 0.2 | 0.1 | 100 |
| 0.250 | 172 000.0.250 | 280 | 0.1 | 80 | 0.2 | 0.1 | 100 |
| 0.315 | 172 000.0.315 | 250 | 0.2 | 80 | 0.2 | 0.1 | 100 |
| 0.400 | 172 000.0.400 | 230 | 0.4 | 80 | 0.2 | 0.1 | 100 |
| 0.500 | 172 000.0.500 | 210 | 0.6 | 80 | 0.2 | 0.1 | 100 |
| 0.630 | 172 000.0.630 | 190 | 0.9 | 80 | 0.2 | 0.1 | 100 |
| 0.800 | 172 000.0.800 | 170 | 1.6 | 80 | 0.3 | 0.1 | 100 |
| 1 | 172 000.1 | 160 | 2.6 | 80 | 0.3 | 0.1 | 100 |
| 1.25 | 172 000.1.25 | 160 | 3.9 | 80 | 0.3 | 0.1 | 100 |
| 1.6 | 172 100.1.6 | 160 | 3.1 | 1000 | 0.8 | 0.12 | 100 |
| 2 | 172 100.2 | 160 | 5.2 | 1000 | 0.8 | 0.12 | 100 |
| 2.5 | 172 100.2.5 | 160 | 10 | 1000 | 0.9 | 0.12 | 100 |
| 3.15 | 172 100.3.15 | 160 | 20 | 1000 | 1.0 | 0.12 | 100 |
| 4 | 172 100.4 | 160 | 37 | 1000 | 1.1 | 0.12 | 100 |
| 5 | 172 100.5 | 150 | 72 | 1000 | 1.3 | 0.12 | 100 |
| 6.3 | 172 100.6.3 | 140 | 130 | 1000 | 1.6 | 0.12 | 100 |
| 8 ¹ | 172 100.8 | 140 | 230 | 300 | 2.0 | 0.12 | 100 |
| 10 ¹ | 172 100.10 | 120 | 370 | 300 | 2.5 | 0.12 | 100 |

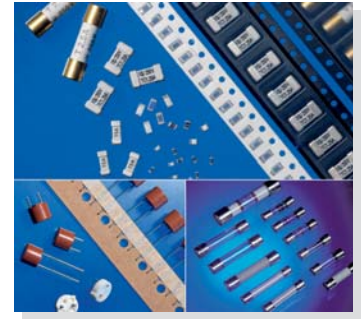
¹ Consideration should be given to heat dissipation.



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 32 mA | > 1 h | < 10 min. | - | 40 ms | 5 ms |
| 1.25 A | | < 30 min. | - | 2 s | 90 ms |
| 1.6 A | | | | | |
| 10 A | | | | | |





Miniature Fuses
Ceramic Tube

M

Size
5 x 20 mm

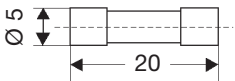
Rated Voltage
250 V

Medium Time Lag

Standard
Not Standardized

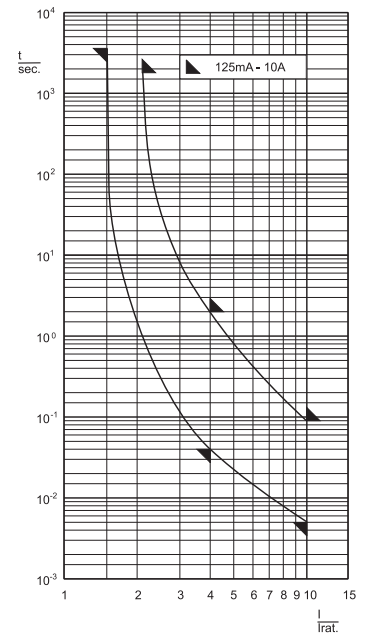
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² ts-value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| 0.125 | 172 200.0.125 | 2 500 | 0.011 | 1 500 | 0.1 | 0.14 | 100 |
| 0.160 | 172 200.0.160 | 2 000 | 0.036 | 1 500 | 0.1 | 0.14 | 100 |
| 0.200 | 172 200.0.200 | 1 800 | 0.05 | 1 500 | 0.2 | 0.14 | 100 |
| 0.250 | 172 200.0.250 | 1 600 | 0.1 | 1 500 | 0.2 | 0.14 | 100 |
| 0.315 | 172 200.0.315 | 1 400 | 0.2 | 1 500 | 0.2 | 0.14 | 100 |
| 0.400 | 172 200.0.400 | 1 200 | 0.4 | 1 500 | 0.2 | 0.14 | 100 |
| 0.500 | 172 200.0.500 | 800 | 0.6 | 1 500 | 0.2 | 0.14 | 100 |
| 0.630 | 172 200.0.630 | 650 | 0.6 | 1 500 | 0.4 | 0.14 | 100 |
| 0.800 | 172 200.0.800 | 500 | 1.0 | 1 500 | 0.6 | 0.14 | 100 |
| 1 | 172 200.1 | 450 | 1.5 | 1 500 | 0.8 | 0.14 | 100 |
| 1.25 | 172 200.1.25 | 400 | 3.1 | 1 500 | 0.8 | 0.14 | 100 |
| 1.6 | 172 200.1.6 | 160 | 3.1 | 1 500 | 0.8 | 0.14 | 100 |
| 2 | 172 200.2 | 160 | 5.2 | 1 500 | 0.8 | 0.14 | 100 |
| 2.5 | 172 200.2.5 | 160 | 10 | 1 500 | 0.9 | 0.14 | 100 |
| 3.15 | 172 200.3.15 | 160 | 20 | 1 500 | 1.0 | 0.14 | 100 |
| 4 | 172 200.4 | 160 | 37 | 1 500 | 1.1 | 0.14 | 100 |
| 5 | 172 200.5 | 150 | 72 | 1 500 | 1.3 | 0.14 | 100 |
| 6.3 | 172 200.6.3 | 140 | 130 | 1 500 | 1.6 | 0.14 | 100 |
| 8 ¹ | 172 200.8 | 140 | 230 | 1 500 | 2.0 | 0.14 | 100 |
| 10 ¹ | 172 200.10 | 120 | 370 | 1 500 | 2.5 | 0.14 | 100 |

¹ Consideration should be given to heat dissipation.



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 125 mA | > 1 h | < 30 min. | - | 40 ms | 5 ms |
| 10 A | | | | 2 s | 90 ms |





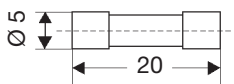
Miniature Fuses Glass Tube

T

Size **5 x 20 mm** Rated Voltage **250 V** Time Lag Standard **DIN VDE 0820-2/3 · IEC 60127-2/3**

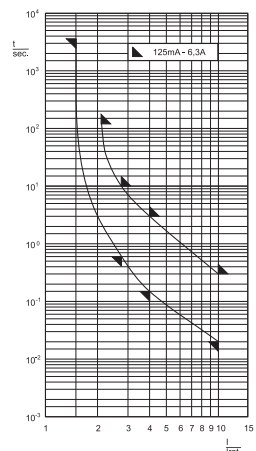
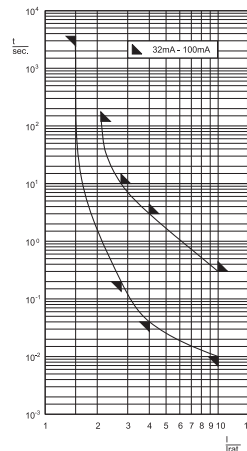
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | SEMKO | VDE | cURus | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-------|-----|-------|-----------------|------|
| 0.032 | 179 120.0.032 | 3 000 | 0.010 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.040 | 179 120.0.040 | 2 000 | 0.020 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.050 | 179 120.0.050 | 1 500 | 0.035 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.063 | 179 120.0.063 | 1 000 | 0.05 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.080 | 179 120.0.080 | 800 | 0.12 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.100 | 179 120.0.100 | 700 | 0.16 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.125 | 179 120.0.125 | 600 | 0.24 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.160 | 179 120.0.160 | 600 | 0.4 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.200 | 179 120.0.200 | 500 | 0.7 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.250 | 179 120.0.250 | 400 | 1.4 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.315 | 179 120.0.315 | 350 | 2.1 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.400 | 179 120.0.400 | 120 | 0.6 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.500 | 179 120.0.500 | 110 | 0.9 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.630 | 179 120.0.630 | 110 | 1.6 | 35 | 0.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 0.800 | 179 120.0.800 | 100 | 3.5 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 1 | 179 120.1 | 80 | 3.9 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 1.25 | 179 120.1.25 | 80 | 5.0 | 35 | 0.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 1.6 | 179 120.1.6 | 80 | 10 | 35 | 0.4 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 2 | 179 120.2 | 80 | 20 | 35 | 0.5 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 2.5 | 179 120.2.5 | 80 | 26 | 35 | 0.6 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 3.15 | 179 120.3.15 | 80 | 44 | 35 | 0.6 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 4 | 179 120.4 | 80 | 72 | 40 | 0.8 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 5 | 179 120.5 | 80 | 130 | 50 | 1.2 | ✓ | ✓ | ✓ | 0.1 | 100 |
| 6.3 | 179 120.6.3 | 70 | 230 | 63 | 1.3 | ✓ | ✓ | ✓ | 0.1 | 100 |
| (8) | 179 120.8 | 70 | 240 | 80 | 1.8 | | | | 0.1 | 100 |
| (10) | 179 120.10 | 70 | 380 | 100 | 2.4 | | | | 0.1 | 100 |
| (12.5) | 179 120.12.5 | 70 | 650 | 125 | 3.0 | | | | 0.1 | 100 |
| (16) | 179 120.16 | 70 | 1 300 | 160 | 3.2 | | | | 0.1 | 100 |
| (20) | 179 120.20 | 70 | 2 200 | 200 | 3.5 | | | | 0.1 | 100 |

(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 32 mA | > 1 h | < 2 min. | 200 ms | 40 ms | 10 ms |
| 100 mA | | | 10 s | 3 s | 300 ms |
| 125 mA | | | 600 ms | 150 ms | 20 ms |
| 6.3 A | | | 10 s | 3 s | 300 ms |





Miniature Fuses
Glass Tube with Filling

T

Size
5 x 20 mm

Rated Voltage
250 V

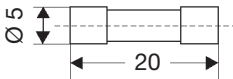
Time Lag

Standard
DIN 47571 Part 3

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|--------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| 1.6 | 173 100.1.6 | 200 ² | 16 | 300 | 0.8 | 0.13 | 100 |
| 2 | 173 100.2 | 190 ² | 26 | 300 | 0.9 | 0.13 | 100 |
| 2.5 | 173 100.2.5 | 180 ² | 45 | 300 | 1.1 | 0.13 | 100 |
| 3.15 | 173 100.3.15 | 140 | 72 | 300 | 1.3 | 0.13 | 100 |
| 4 | 173 100.4 | 135 | 130 | 300 | 1.4 | 0.13 | 100 |
| 5 | 173 100.5 | 130 | 150 | 300 | 1.2 | 0.13 | 100 |
| 6.3 | 173 100.6.3 | 125 | 240 | 300 | 1.3 | 0.13 | 100 |
| 8 ¹ | 173 100.8 | 120 | 390 | 300 | 1.6 | 0.13 | 100 |
| 10 ¹ | 173 100.10 | 115 | 620 | 300 | 1.9 | 0.13 | 100 |
| 12.5 ¹ | 173 100.12.5 | 100 | 1 150 | 300 | 2.8 | 0.13 | 100 |
| 15 ¹ | 173 100.15 | 80 | 1 800 | 300 | 3.3 | 0.13 | 100 |
| 16 ¹ | 173 100.16 | 80 | 1 800 | 300 | 3.8 | 0.13 | 100 |

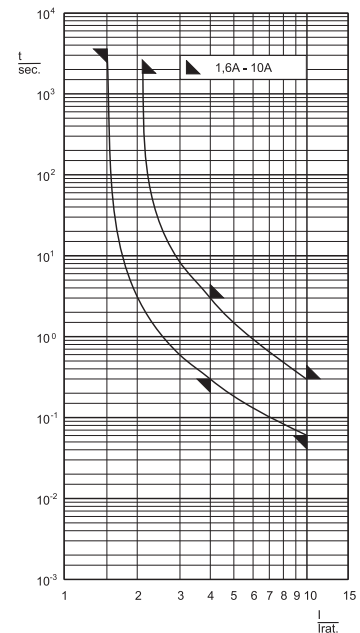
¹ Consideration should be given to heat dissipation.

² max according to EN 60127-2/5.



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 1.6 A | > 1 h | < 30 min. | - | 300 ms | 60 ms |
| 10 A | | | | 3 s | 300 ms |





Miniature Fuses

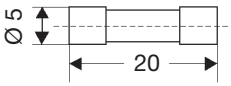
Ceramic Tube

T

Size **5 x 20 mm** Rated Voltage **250 V** Time Lag Standard **DIN VDE 0820-2/5 · IEC 60127-2/5**

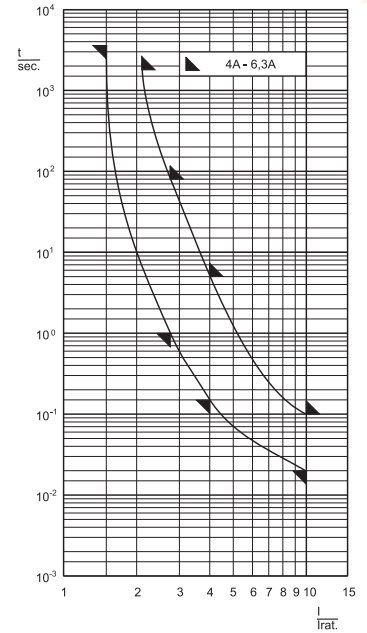
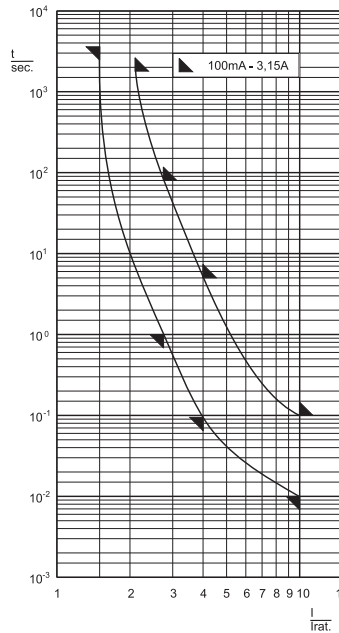
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | SEMKO VDE cURus UR BSI | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|------------------------------------|-----------------|------|
| 0.100 | 179 200.0.100 | 2 300 | 0.020 | 1 500 | 0.6 | | 0.13 | 100 |
| 0.125 | 179 200.0.125 | 2 200 | 0.045 | 1 500 | 0.8 | | 0.13 | 100 |
| 0.160 | 179 200.0.160 | 2 100 | 0.08 | 1 500 | 0.9 | | 0.13 | 100 |
| 0.200 | 179 200.0.200 | 1 800 | 0.14 | 1 500 | 0.9 | | 0.13 | 100 |
| 0.250 | 179 200.0.250 | 1 500 | 0.25 | 1 500 | 1.0 | | 0.13 | 100 |
| 0.315 | 179 200.0.315 | 1 000 | 0.45 | 1 500 | 1.0 | | 0.13 | 100 |
| 0.400 | 179 200.0.400 | 850 | 0.8 | 1 500 | 1.0 | | 0.13 | 100 |
| 0.500 | 179 200.0.500 | 700 | 1.6 | 1 500 | 1.0 | | 0.13 | 100 |
| 0.630 | 179 200.0.630 | 300 | 0.6 | 1 500 | 0.4 | | 0.13 | 100 |
| 0.800 | 179 200.0.800 | 300 | 1.0 | 1 500 | 0.6 | | 0.13 | 100 |
| 1 | 179 200.1 | 350 | 1.5 | 1 500 | 0.8 | ✓ ✓ ✓ | 0.13 | 100 |
| 1.25 | 179 200.1.25 | 250 | 3.1 | 1 500 | 0.8 | ✓ ✓ ✓ | 0.13 | 100 |
| 1.6 | 179 200.1.6 | 150 | 3.1 | 1 500 | 0.8 | ✓ ✓ ✓ | 0.13 | 100 |
| 2 | 179 200.2 | 130 | 5.2 | 1 500 | 0.8 | ✓ ✓ ✓ | 0.13 | 100 |
| 2.5 | 179 200.2.5 | 110 | 10 | 1 500 | 0.9 | ✓ ✓ ✓ | 0.13 | 100 |
| 3.15 | 179 200.3.15 | 100 | 20 | 1 500 | 1.0 | ✓ ✓ ✓ | 0.13 | 100 |
| 4 | 179 200.4 | 90 | 37 | 1 500 | 1.1 | ✓ ✓ ✓ | 0.13 | 100 |
| 5 | 179 200.5 | 90 | 72 | 1 500 | 1.3 | ✓ ✓ ✓ | 0.13 | 100 |
| 6.3 | 179 200.6.3 | 90 | 130 | 1 500 | 1.6 | ✓ ✓ ✓ | 0.13 | 100 |
| 8 ¹ | 179 200.8 | 90 | 230 | 1 500 | 2.0 | | 0.13 | 100 |
| 10 ¹ | 179 200.10 | 90 | 370 | 1 500 | 2.5 | | 0.13 | 100 |
| 12.5 ¹ | 179 200.12.5 | 70 | 670 | 1 500 | 3.1 | | 0.13 | 100 |
| 16 ¹ | 179 200.16 | 70 | 1500 | 1 500 | 3.9 | | 0.13 | 100 |

¹ Consideration should be given to heat dissipation.



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 100 mA | > 1 h | < 30 min. | 1 s 80 s | 95 ms | 10 ms |
| 3.15 A | | | | 5 s | 100 ms |
| 4 A | | | | 150 ms | 20 ms |
| 6.3 A | | | | 5 s | 100 ms |





Miniature Fuses
Glass Tube

T

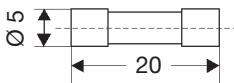
Size
5 x 20 mm

Rated Voltage
250 V

Time Lag

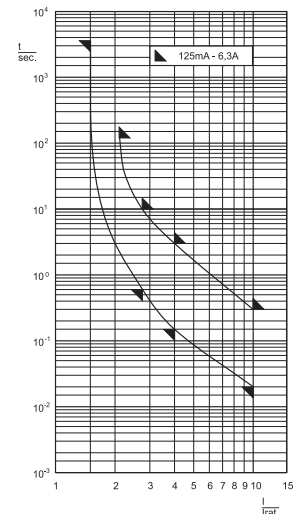
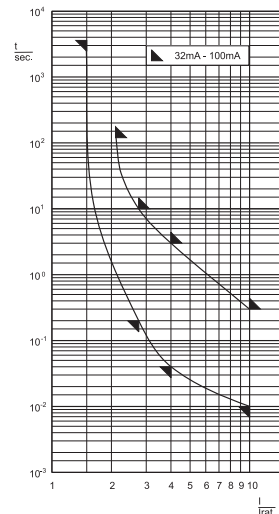
Standard
DIN VDE 0820-2/6 · IEC 60127-2/6

| Rated Current [A] | Part No. | Voltage drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | SEMLO VDE | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------|-----------------|------|
| 0.032 | 179 150.0.032 | 3 000 | 0.010 | 150 | 0.2 | | 0.1 | 100 |
| 0.040 | 179 150.0.040 | 2 000 | 0.020 | 150 | 0.2 | | 0.1 | 100 |
| 0.050 | 179 150.0.050 | 1 500 | 0.035 | 150 | 0.2 | | 0.1 | 100 |
| 0.063 | 179 150.0.063 | 1 000 | 0.05 | 150 | 0.2 | | 0.1 | 100 |
| 0.080 | 179 150.0.080 | 800 | 0.12 | 150 | 0.2 | | 0.1 | 100 |
| 0.100 | 179 150.0.100 | 700 | 0.16 | 150 | 0.3 | | 0.1 | 100 |
| 0.125 | 179 150.0.125 | 600 | 0.24 | 150 | 0.3 | | 0.1 | 100 |
| 0.160 | 179 150.0.160 | 600 | 0.4 | 150 | 0.3 | | 0.1 | 100 |
| 0.200 | 179 150.0.200 | 500 | 0.7 | 150 | 0.3 | | 0.1 | 100 |
| 0.250 | 179 150.0.250 | 400 | 1.4 | 150 | 0.3 | | 0.1 | 100 |
| 0.315 | 179 150.0.315 | 350 | 2.1 | 150 | 0.3 | | 0.1 | 100 |
| 0.400 | 179 150.0.400 | 120 | 0.6 | 150 | 0.2 | | 0.1 | 100 |
| 0.500 | 179 150.0.500 | 110 | 0.9 | 150 | 0.2 | ✓ ✓ | 0.1 | 100 |
| 0.630 | 179 150.0.630 | 110 | 1.6 | 150 | 0.2 | ✓ ✓ | 0.1 | 100 |
| 0.800 | 179 150.0.800 | 100 | 3.5 | 150 | 0.3 | ✓ ✓ | 0.1 | 100 |
| 1 | 179 150.1 | 80 | 3.9 | 150 | 0.3 | ✓ ✓ | 0.1 | 100 |
| 1.25 | 179 150.1.25 | 80 | 5.0 | 150 | 0.3 | ✓ ✓ | 0.1 | 100 |
| 1.6 | 179 150.1.6 | 80 | 10 | 150 | 0.4 | ✓ ✓ | 0.1 | 100 |
| 2 | 179 150.2 | 80 | 20 | 150 | 0.5 | ✓ ✓ | 0.1 | 100 |
| 2.5 | 179 150.2.5 | 80 | 26 | 150 | 0.6 | ✓ ✓ | 0.1 | 100 |
| 3.15 | 179 150.3.15 | 80 | 44 | 150 | 0.6 | ✓ ✓ | 0.1 | 100 |
| 4 | 179 150.4 | 80 | 72 | 150 | 0.8 | ✓ ✓ | 0.1 | 100 |
| 5 | 179 150.5 | 80 | 130 | 150 | 1.2 | | 0.1 | 100 |
| 6.3 | 179 150.6.3 | 70 | 230 | 150 | 1.3 | | 0.1 | 100 |
| 8 | 179 150.8 | 70 | 240 | 150 | 1.8 | | 0.1 | 100 |
| 10 | 179 150.10 | 70 | 380 | 150 | 2.4 | | 0.1 | 100 |



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 32 mA | > 1 h | < 2 min. | 200 ms | 40 ms | 10 ms |
| 100 mA | | | 10 s | 3 s | 300 ms |
| 125 mA | | | 600 ms | 150 ms | 20 ms |
| 6.3 A | | | 10 s | 3 s | 300 ms |





Miniature Fuses

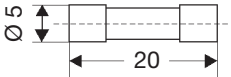
Glass Tube

T

Size **5 x 20 mm** Rated Voltage **250 V** Time Lag Standard **UL 248-14 · CSA C22.2 No. 248.14**

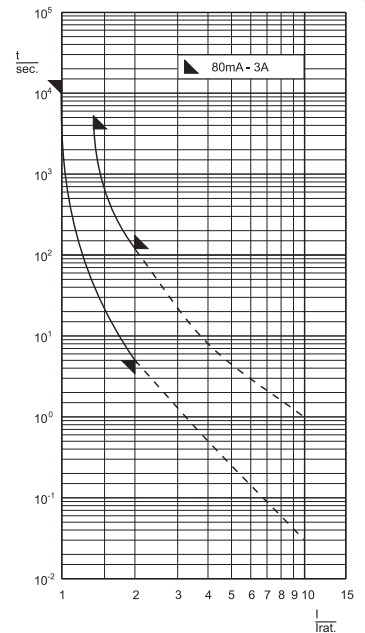
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | UL | cUL | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|----|-----|-----------------|------|
| 0.080 | 179 500.0.080 | 2 800 | 0.024 | 35 ¹ | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.100 | 179 500.0.100 | 2 400 | 0.053 | 35 ¹ | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.125 | 179 500.0.125 | 2 100 | 0.08 | 35 ¹ | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.150 | 179 500.0.150 | 1 800 | 0.13 | 35 ¹ | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.200 | 179 500.0.200 | 1 300 | 0.24 | 35 ¹ | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.250 | 179 500.0.250 | 1 100 | 0.42 | 35 ¹ | 0.3 | ✓ | ✓ | 0.1 | 100 |
| 0.300 | 179 500.0.300 | 1 050 | 0.8 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.375 | 179 500.0.375 | 900 | 1.5 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.400 | 179 500.0.400 | 850 | 1.6 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.500 | 179 500.0.500 | 650 | 2.0 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.600 | 179 500.0.600 | 550 | 3.1 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.700 | 179 500.0.700 | 500 | 4.5 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.750 | 179 500.0.750 | 450 | 5.5 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 0.800 | 179 500.0.800 | 400 | 6.4 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 1 | 179 500.1 | 350 | 12 | 35 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 1.25 | 179 500.1.25 | 300 | 19 | 100 ¹ | 0.4 | ✓ | ✓ | 0.1 | 100 |
| 1.5 | 179 500.1.5 | 280 | 25 | 100 ¹ | 0.5 | ✓ | ✓ | 0.1 | 100 |
| 1.6 | 179 500.1.6 | 270 | 32 | 100 ¹ | 0.5 | ✓ | ✓ | 0.1 | 100 |
| 2 | 179 500.2 | 325 | 55 | 100 ¹ | 0.5 | ✓ | ✓ | 0.1 | 100 |
| 2.5 | 179 500.2.5 | 215 | 90 | 100 ¹ | 0.6 | ✓ | ✓ | 0.1 | 100 |
| 3 | 179 500.3 | 200 | 160 | 100 ¹ | 0.6 | ✓ | ✓ | 0.1 | 100 |

¹ 10.000 A @ 125 V AC



Pre-Arcing Time Limits

| Rated Current | 1.0 I _n | 1.35 I _n | 2 I _n |
|---------------|--------------------|---------------------|------------------|
| 80 mA | 4 h | 1 h | 5 s |
| 3 A | | | 120 s |





Miniature Fuses
Ceramic Tube

FF

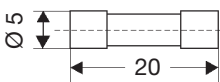
Size
5 x 20 mm

Rated Voltage
250 V

Very Fast Acting

Standard
Not Standardized

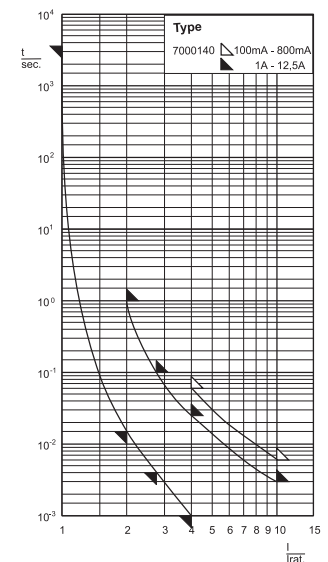
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | cURus | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|--------------------------------------------------------------------|------------------------------|-----------------------|-------|-----------------|------|
| 0.100 | 70 001 40.0.100 | 4 000 | 0.0016 | 300 | 0.4 | | 0.14 | 100 |
| 0.125 | 70 001 40.0.125 | 3 500 | 0.0024 | 300 | 0.5 | ✓ | 0.14 | 100 |
| 0.160 | 70 001 40.0.160 | 1 300 | 0.004 | 300 | 0.3 | ✓ | 0.14 | 100 |
| 0.200 | 70 001 40.0.200 | 600 | 0.01 | 300 | 0.2 | ✓ | 0.14 | 100 |
| 0.250 | 70 001 40.0.250 | 550 | 0.02 | 300 | 0.2 | ✓ | 0.14 | 100 |
| 0.315 | 70 001 40.0.315 | 500 | 0.04 | 300 | 0.2 | ✓ | 0.14 | 100 |
| 0.400 | 70 001 40.0.400 | 500 | 0.07 | 300 | 0.2 | ✓ | 0.14 | 100 |
| 0.500 | 70 001 40.0.500 | 550 | 0.07 | 300 | 0.3 | ✓ | 0.14 | 100 |
| 0.630 | 70 001 40.0.630 | 600 | 0.15 | 300 | 0.4 | ✓ | 0.14 | 100 |
| 0.800 | 70 001 40.0.800 | 600 | 0.32 | 300 | 0.5 | ✓ | 0.14 | 100 |
| 1 | 70 001 40.1 | 600 | 0.32 | 300 | 0.6 | ✓ | 0.14 | 100 |
| 1.25 | 70 001 40.1.25 | 400 | 0.20 | 300 | 0.5 | ✓ | 0.14 | 100 |
| 1.6 | 70 001 40.1.6 | 400 | 0.31 | 300 | 0.7 | ✓ | 0.14 | 100 |
| 2 | 70 001 40.2 | 400 | 0.64 | 300 | 0.8 | ✓ | 0.14 | 100 |
| 2.5 | 70 001 40.2.5 | 400 | 0.88 | 300 | 1.0 | ✓ | 0.14 | 100 |
| 3.15 | 70 001 40.3.15 | 400 | 1.6 | 300 | 1.3 | ✓ | 0.14 | 100 |
| 4 | 70 001 40.4 | 350 | 3.2 | 300 | 1.4 | ✓ | 0.14 | 100 |
| 5 | 70 001 40.5 | 350 | 5.9 | 300 | 1.8 | ✓ | 0.14 | 100 |
| 6.3 | 70 001 40.6.3 | 300 | 10 | 1 500 | 1.9 | | 0.14 | 100 |
| 8 | 70 001 40.8 | 300 | 19 | 1 500 | 2.4 | | 0.14 | 100 |
| 10 | 70 001 40.10 | 300 | 30 | 1 500 | 3.0 | | 0.14 | 100 |
| 12.5 | 70 001 40.12.5 | 200 | 115 | 1 500 | 2.5 | | 0.14 | 100 |



Pre-Arcing Time Limits

Part No. 70 001 40

| Rated Current | 1.0 I _{rat} | 2.0 I _{rat} | 2.75 I _{rat} | 4 I _{rat} | 10 I _{rat} |
|---------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 100 mA | > 1 h | - | - | < 60 ms | < 6 ms |
| 800 mA | | | | | |
| 1 A | > 1 h | < 1 s | < 100 ms | 1 ms | < 3 ms |
| 12.5 A | | | | 25 ms | |





Miniature Fuses Ceramic Tube

FF

Size **5 x 20 mm** Rated Voltage **250 V / 380 V** **Very Fast Acting** Standard **special type**

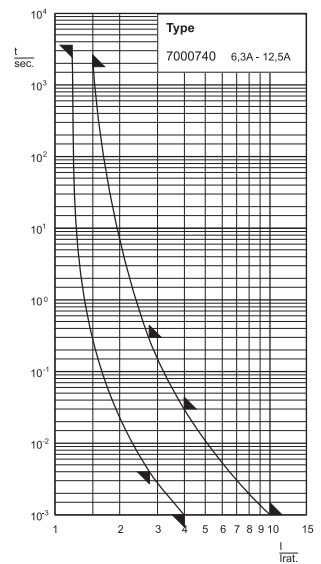
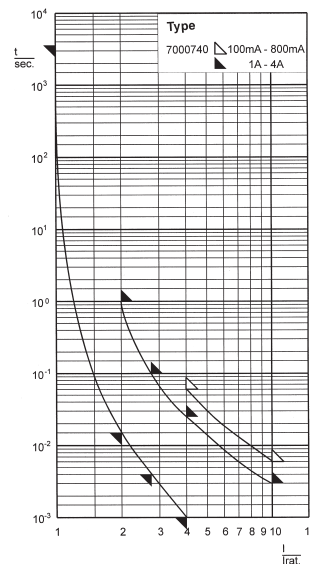
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | cUL | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|--------------------------------------------------------------------|------------------------------|-----------------------|-----|-----------------|------|
| 0.100 | 70 007 40.0.100 | 4 000 | 0.0016 | 10 | 0.4 | | 0.14 | 100 |
| 0.125 | 70 007 40.0.125 | 3 500 | 0.0024 | 10 | 0.5 | | 0.14 | 100 |
| 0.160 | 70 007 40.0.160 | 1 300 | 0.004 | 10 | 0.3 | | 0.14 | 100 |
| 0.200 | 70 007 40.0.200 | 600 | 0.01 | 10 | 0.2 | | 0.14 | 100 |
| 0.250 | 70 007 40.0.250 | 550 | 0.02 | 10 | 0.2 | | 0.14 | 100 |
| 0.315 | 70 007 40.0.315 | 500 | 0.04 | 10 | 0.2 | | 0.14 | 100 |
| 0.400 | 70 007 40.0.400 | 500 | 0.07 | 10 | 0.2 | | 0.14 | 100 |
| 0.500 | 70 007 40.0.500 | 550 | 0.07 | 10 | 0.3 | | 0.14 | 100 |
| 0.630 | 70 007 40.0.630 | 600 | 0.15 | 10 | 0.4 | | 0.14 | 100 |
| 0.800 | 70 007 40.0.800 | 600 | 0.32 | 10 | 0.5 | | 0.14 | 100 |
| 1 | 70 007 40.1 | 600 | 0.32 | 10 | 0.6 | | 0.14 | 100 |
| 1.25 | 70 007 40.1.25 | 400 | 0.20 | 10 | 0.5 | | 0.14 | 100 |
| 1.6 | 70 007 40.1.6 | 400 | 0.31 | 10 | 0.7 | | 0.14 | 100 |
| 2 | 70 007 40.2 | 400 | 0.64 | 10 | 0.8 | | 0.14 | 100 |
| 2.5 | 70 007 40.2.5 | 400 | 0.88 | 10 | 1.0 | | 0.14 | 100 |
| 3.15 | 70 007 40.3.15 | 400 | 1.6 | 10 | 1.3 | | 0.14 | 100 |
| 4 | 70 007 40.4 | 350 | 3.2 | 10 | 1.4 | | 0.14 | 100 |
| 6.3 | 70 007 40.6.3 | 250 | 1.6 | 300 | 3.0 | ✓ | 0.14 | 100 |
| 8 | 70 007 40.8 | 230 | 4.5 | 300 | 3.0 | ✓ | 0.14 | 100 |
| 10 | 70 007 40.10 | 180 | 8.8 | 300 | 3.4 | ✓ | 0.14 | 100 |
| 12.5 | 70 007 40.12.5 | 150 | 15 | 300 | 4.0 | ✓ | 0.14 | 100 |
| 16* | 70 007 40.16 | 130 | 46 | 10 | 3.8 | ✓ | 0.14 | 100 |

*125 V

Pre-Arcing Time Limits

| Rated Current | 1.0 I _{rat} | 2.0 I _{rat} | 2.75 I _{rat} | 4 I _{rat} | 10 I _{rat} |
|-----------------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 100 mA ▼ 800 mA | 1 h | - | - | 60 ms | 6 ms |
| 1 A ▼ 4 A | | 1 s | 4 ms | 1 ms ▼ 25 ms | 3 ms |

| Rated Current | 1.2 I _{rat} | 1.5 I _{rat} | 2.75 I _{rat} | 4 I _{rat} | 10 I _{rat} |
|----------------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 6.3 A ▼ 12.5 A | 1 h | 30 min | 4 ms ▼ 300 ms | 1 ms ▼ 30 ms | 1 ms |





Miniature Fuses

Glass Tube

TT

Size
5 x 20 mm

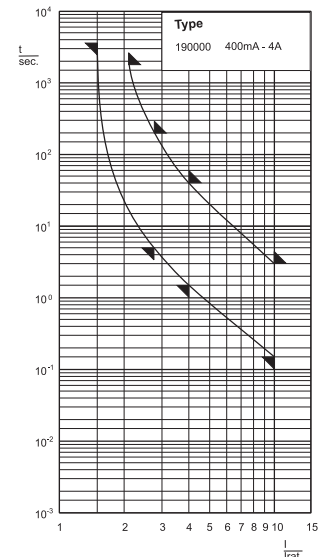
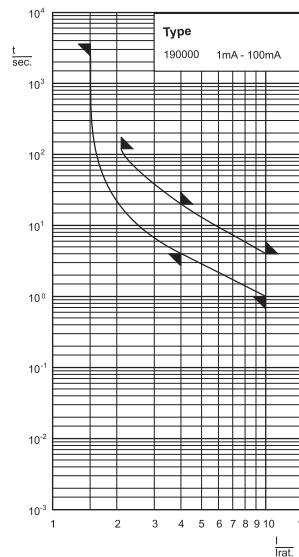
Rated Voltage
250 V

Long Time Lag

Standard
Special Type

| Rated Current [A] | Part No. | Voltage Drop [V] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | cUL | Weight [kg/100] | Pack |
|-------------------|----------------|------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----|-----------------|------|
| 0.001 | 190 000.0.001 | 130 | * | 20 | * | | 0.1 | 100 |
| 0.001.6 | 190 000.0.0016 | 125 | * | 20 | * | | 0.1 | 100 |
| 0.002.5 | 190 000.0.0025 | 65 | * | 20 | * | | 0.1 | 100 |
| 0.004 | 190 000.0.004 | 40 | * | 20 | * | | 0.1 | 100 |
| 0.006 | 190 000.0.006 | 23 | * | 20 | * | | 0.1 | 100 |
| 0.010 | 190 000.0.010 | 16 | * | 20 | * | | 0.1 | 100 |
| 0.016 | 190 000.0.016 | 10 | * | 20 | * | | 0.1 | 100 |
| 0.025 | 190 000.0.025 | 6.5 | * | 20 | * | | 0.1 | 100 |
| 0.032 | 190 000.0.032 | 4 | * | 20 | * | | 0.1 | 100 |
| 0.040 | 190 000.0.040 | 3 | * | 20 | * | | 0.1 | 100 |
| 0.060 | 190 000.0.060 | 2.3 | * | 20 | * | | 0.1 | 100 |
| 0.100 | 190 000.0.100 | 1.6 | * | 20 | * | | 0.1 | 100 |
| 0.400 | 190 000.0.400 | 500 mV | 2.5 | 35 | * | | 0.1 | 100 |
| 0.500 | 190 000.0.500 | 450 mV | 4.6 | 35 | * | | 0.1 | 100 |
| 0.600 | 190 000.0.600 | 400 mV | 10 | 35 | * | | 0.1 | 100 |
| 0.800 | 190 000.0.800 | 300 mV | 15 | 35 | * | | 0.1 | 100 |
| 1 | 190 000.1 | 250 mV | 26 | 35 | * | | 0.1 | 100 |
| 1.25 | 190 000.1.25 | 200 mV | 37 | 35 | * | | 0.1 | 100 |
| 1.6 | 190 000.1.6 | 200 mV | 45 | 35 | * | | 0.1 | 100 |
| 2 | 190 000.2 | 200 mV | 72 | 35 | * | | 0.1 | 100 |
| 2.5 | 190 000.2.5 | 150 mV | 130 | 35 | * | | 0.1 | 100 |
| 3.15 | 190 000.3.15 | 150 mV | 230 | 35 | * | | 0.1 | 100 |
| 4 | 190 000.4 | 100 mV | 370 | 40 | * | | 0.1 | 100 |

* on request



Pre-Arcing Time Limits

| Rated Current | 1.5 I _{rat} | 2.1 I _{rat} | 2.75 I _{rat} | 4 I _{rat} | 10 I _{rat} |
|---------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 1 mA | 1 h | 2 min. | - | 4 s | 1 s |
| 100 mA | | | | 20 s | 4 s |
| 400 mA | 30 min. | 5 s | 200 s | 1,5 s | 150 ms |
| 4 A | | | | 40 s | 3 s |



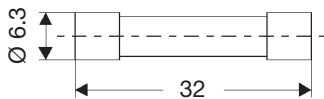
Miniature Fuses Glass Tube

F

Size **6.3 x 32 mm** Rated Voltage **250 V** **Fast Acting** Standard **DIN VDE 0820-2/4 · IEC 60127-2/4**

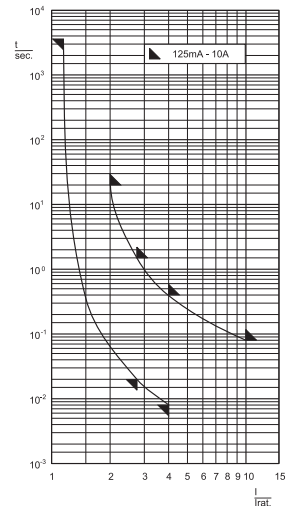
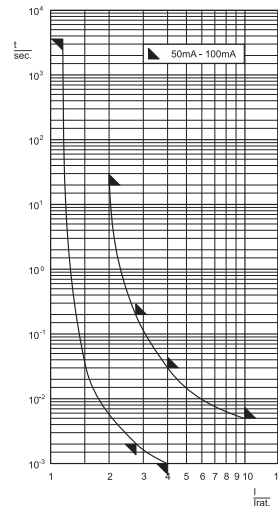
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| 0.050 | 189 000.0.050 | 9 600 | 0.0003 | 35 | 0.7 | 0.1 | 100 |
| 0.063 | 189 000.0.063 | 6 000 | 0.0005 | 35 | 0.5 | 0.1 | 100 |
| 0.080 | 189 000.0.080 | 5 000 | 0.0010 | 35 | 0.6 | 0.1 | 100 |
| 0.100 | 189 000.0.100 | 4 500 | 0.0014 | 35 | 0.7 | 0.1 | 100 |
| 0.125 | 189 000.0.125 | 4 000 | 0.0034 | 35 | 0.7 | 0.1 | 100 |
| 0.160 | 189 000.0.160 | 3 500 | 0.007 | 35 | 0.8 | 0.1 | 100 |
| 0.200 | 189 000.0.200 | 3 000 | 0.013 | 35 | 0.9 | 0.1 | 100 |
| 0.250 | 189 000.0.250 | 3 000 | 0.022 | 35 | 1.0 | 0.1 | 100 |
| 0.315 | 189 000.0.315 | 2 500 | 0.054 | 35 | 1.1 | 0.1 | 100 |
| 0.400 | 189 000.0.400 | 2 500 | 0.11 | 35 | 1.2 | 0.1 | 100 |
| 0.500 | 189 000.0.500 | 1 900 | 0.21 | 35 | 1.3 | 0.1 | 100 |
| 0.630 | 189 000.0.630 | 400 | 0.26 | 35 | 0.4 | 0.1 | 100 |
| 0.800 | 189 000.0.800 | 350 | 0.57 | 35 | 0.4 | 0.1 | 100 |
| 1 | 189 000.1 | 300 | 1.1 | 35 | 0.5 | 0.1 | 100 |
| 1.25 | 189 000.1.25 | 300 | 2.0 | 35 | 0.6 | 0.1 | 100 |
| 1.6 | 189 000.1.6 | 300 | 3.3 | 35 | 0.7 | 0.1 | 100 |
| 2 | 189 000.2 | 250 | 6.2 | 35 | 0.8 | 0.1 | 100 |
| 2.5 | 189 000.2.5 | 220 | 13 | 35 | 0.9 | 0.1 | 100 |
| 3.15 | 189 000.3.15 | 200 | 24 | 35 | 1.1 | 0.1 | 100 |
| 4 | 189 000.4 | 200 | 40 | 40 | 1.3 | 0.1 | 100 |
| 5 | 189 000.5 | 180 | 80 | 50 | 1.4 | 0.1 | 100 |
| 6.3 | 189 000.6.3 | 170 | 150 | 63 | 1.6 | 0.1 | 100 |
| 8 ¹ | 189 000.8 | 160 | 240 | 80 | 2.0 | 0.1 | 100 |
| 10 ¹ | 189 000.10 | 150 | 500 | 100 | 2.3 | 0.1 | 100 |
| 12.5 ¹ | 189 000.12.5 | 140 | 650 | 125 | 2.5 | 0.1 | 100 |
| 16 ¹ | 189 000.16 | 130 | 1 250 | 160 | 2.8 | 0.1 | 100 |
| 20 ¹ | 189 000.20 | 130 | 1 600 | 200 | 4.0 | 0.1 | 100 |

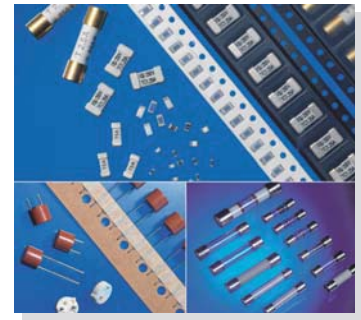
¹ Consideration should be given to heat dissipation.



Pre-Arcing Time Limits

| Rated Current | 1.15 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|---------------------|--------------------|---------------------|------------------|-------------------|
| 50 mA | | | 2 ms | 1 ms | < 5 ms |
| 100 mA | | | 200 ms | 30 ms | |
| 125 mA | < 1 h | < 20 s | 20 ms | 8 ms | < 80 ms |
| 10 A | | | 1.5 s | 400 ms | |





Miniature Fuses

Ceramic Tube

F

Size **6.3 x 32 mm** Rated Voltage **500 V** **Fast Acting** Standard **Not Standardized**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | UL _{rec.} | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|------------------------------|-----------------------|--------------------|-----------------|------|
| 0.160 | 189 020.0.160 | 7 000 | 0.0015 | 50 ¹ | 2.5 | ✓ | 0.24 | 100 |
| 0.200 | 189 020.0.200 | 6 500 | 0.0035 | 50 ¹ | 2.9 | ✓ | 0.24 | 100 |
| 0.250 | 189 020.0.250 | 6 000 | 0.0085 | 50 ¹ | 3.4 | ✓ | 0.24 | 100 |
| 0.315 | 189 020.0.315 | 1 000 | 0.025 | 50 ¹ | 0.9 | ✓ | 0.24 | 100 |
| 0.400 | 189 020.0.400 | 900 | 0.045 | 50 ¹ | 1.0 | ✓ | 0.24 | 100 |
| 0.500 | 189 020.0.500 | 800 | 0.09 | 50 ¹ | 1.1 | ✓ | 0.24 | 100 |
| 0.630 | 189 020.0.630 | 700 | 0.15 | 50 ¹ | 1.3 | ✓ | 0.24 | 100 |
| 0.800 | 189 020.0.800 | 600 | 0.3 | 50 ¹ | 1.4 | ✓ | 0.24 | 100 |
| 1 | 189 020.1 | 400 | 0.4 | 50 ¹ | 1.2 | ✓ | 0.24 | 100 |
| 1.25 | 189 020.1.25 | 300 | 0.8 | 50 ¹ | 1.3 | ✓ | 0.24 | 100 |
| 1.6 | 189 020.1.6 | 300 | 1.5 | 50 ¹ | 1.4 | ✓ | 0.24 | 100 |
| 2 | 189 020.2 | 280 | 2.5 | 50 ¹ | 1.6 | ✓ | 0.24 | 100 |
| 2.5 | 189 020.2.5 | 260 | 5 | 50 ¹ | 1.8 | ✓ | 0.24 | 100 |
| 3.15 | 189 020.3.15 | 240 | 9 | 50 ¹ | 2.3 | ✓ | 0.24 | 100 |
| 4 | 189 020.4 | 220 | 18 | 50 ¹ | 2.6 | ✓ | 0.24 | 100 |
| 5 | 189 020.5 | 190 | 40 | 50 ¹ | 2.9 | ✓ | 0.24 | 100 |
| 6.3 | 189 020.6.3 | 170 | 80 | 50 ¹ | 3.2 | ✓ | 0.24 | 100 |
| 8 | 189 020.8 | 160 | 150 | 1.5 ² | 3.7 | | 0.24 | 100 |
| 10 | 189 020.10 | 150 | 240 | 1.5 ² | 4.0 | | 0.24 | 100 |
| 12.5 | 189 020.12.5 | 140 | 500 | 1.5 ² | 5.5 | | 0.24 | 100 |
| 16 | 189 020.16 | 130 | 920 | 1.5 ² | 6.5 | | 0.24 | 100 |

Size **6.3 x 32 mm** Rated Voltage **440 V** **Fast Acting** Standard **Not Standardized**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | UL _{rec.} | Weight [kg/100] | Pack |
|-------------------|------------|-------------------|--------------------------------------------------------------------|------------------------------|-----------------------|--------------------|-----------------|------|
| 20 ¹ | 189 020.20 | 120 | 1 500 | 1.5 ² | 8.4 | | 0.24 | 100 |
| 25 ¹ | 189 020.25 | 110 | 3 100 | 1.5 ² | 11 | | 0.24 | 100 |

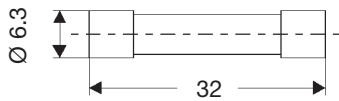
Consideration should be given to heat dissipation for 6.3A and up.

¹⁾ $\cos\phi=0.3$, 20kA @ 400V_{DC} (No UL Rec.)

²⁾ $\cos\phi=1$



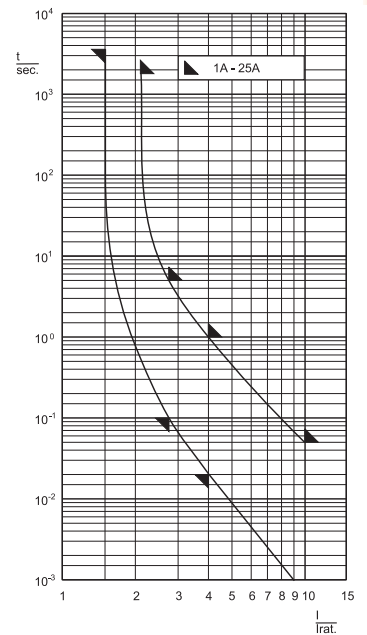
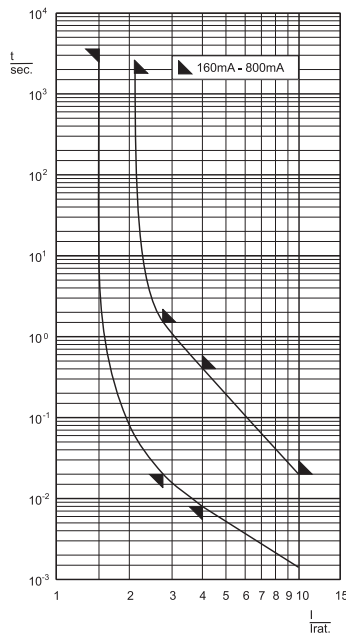
Miniature Fuses
Ceramic Tube **F**



Pre-Arcing Time Limits

| Rated Current | $1.5 I_n$ | $2.1 I_n$ | $2.75 I_n$ | $4 I_n$ | $10 I_n$ |
|---------------|-----------|-----------|------------|---------|----------|
| 160 mA | > 1 h | 30 min. | 20 ms | 8 ms | < 20 ms |
| 800 mA | | | 1.5 s | 0.4 s | |
| 1 A | > 1 h | 30 min. | 100 ms | 20 ms | < 50 ms |
| 25 A | | | 5 s | 1 s | |

189.020





Miniature Fuses
Ceramic Tube

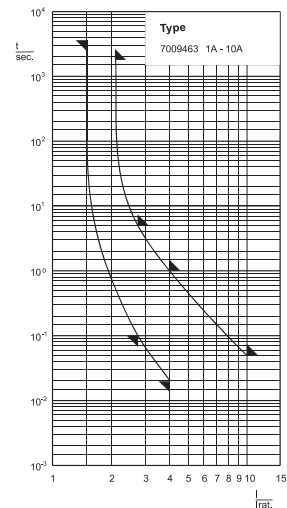
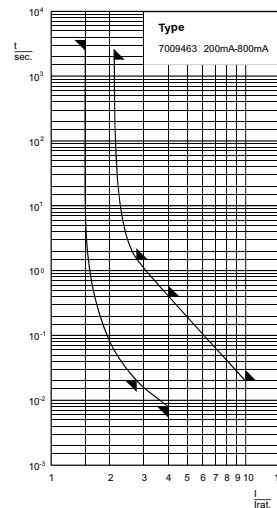
F

Size **6.3 x 32 mm** Rated Voltage **600 V** **Fast Acting** Standard **Special Type**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|--------------------------------------------------------------------|------------------------------|-----------------------|-----------------|------|
| 0.200 | 70 094 63.0.200 | 6 500 | 0.0035 | 50 | 2.9 | 0.12 | 100 |
| 0.500 | 70 094 63.0.500 | 800 | 0.19 | 50 | 1.1 | 0.12 | 100 |
| 0.800 | 70 094 63.0.800 | 600 | 0.49 | 50 | 1.4 | 0.12 | 100 |
| 1 | 70 094 63.1 | 400 | 0.4 | 50 | 1.2 | 0.12 | 100 |
| 2 | 70 094 63.2 | 280 | 2.5 | 50 | 1.6 | 0.12 | 100 |
| 3 | 70 094 63.3 | 260 | 7.5 | 50 | 2.2 | 0.12 | 100 |
| 5 | 70 094 63.5 | 190 | 40 | 50 | 2.9 | 0.12 | 100 |
| 7 | 70 094 63.7 | 150 | 100 | 50 | 3.8 | 0.12 | 100 |
| 10 | 70 094 63.10 | 150 | 240 | 50 | 4.0 | 0.12 | 100 |

Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 200 mA | > 1 h | <30 min. | 20 ms | 8 ms | < 20 ms |
| 800 mA | | | 100 ms | 400 ms | |
| 1 A | | | 1.5 s | 20 ms | |
| 10 A | | | 5 s | 1 s | < 50 ms |



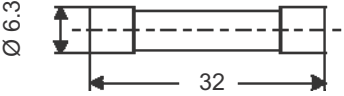


Miniature Fuses
GlassTube T

Size **6.3 x 32 mm** Rated Voltage **250 V** Time Lag

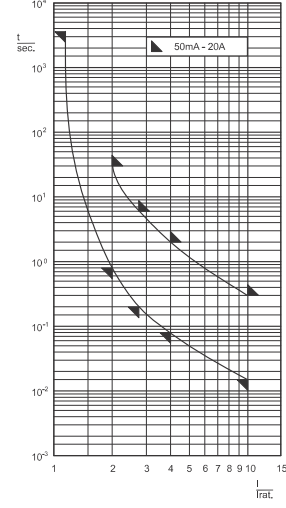
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| 0.050 | 189 100.0.050 | 3 000 | 0.035 | 35 | 0.3 | 0.12 | 100 |
| 0.063 | 189 100.0.063 | 2 500 | 0.06 | 35 | 0.3 | 0.12 | 100 |
| 0.080 | 189 100.0.080 | 2 000 | 0.13 | 35 | 0.3 | 0.12 | 100 |
| 0.100 | 189 100.0.100 | 1 500 | 0.17 | 35 | 0.3 | 0.12 | 100 |
| 0.125 | 189 100.0.125 | 1 200 | 0.26 | 35 | 0.3 | 0.12 | 100 |
| 0.160 | 189 100.0.160 | 1 100 | 0.44 | 35 | 0.4 | 0.12 | 100 |
| 0.200 | 189 100.0.200 | 1 000 | 0.84 | 35 | 0.4 | 0.12 | 100 |
| 0.250 | 189 100.0.250 | 900 | 1.5 | 35 | 0.5 | 0.12 | 100 |
| 0.315 | 189 100.0.315 | 800 | 2.4 | 35 | 0.5 | 0.12 | 100 |
| 0.400 | 189 100.0.400 | 300 | 0.6 | 35 | 0.2 | 0.12 | 100 |
| 0.500 | 189 100.0.500 | 300 | 0.9 | 35 | 0.3 | 0.12 | 100 |
| 0.630 | 189 100.0.630 | 300 | 1.6 | 35 | 0.3 | 0.12 | 100 |
| 0.800 | 189 100.0.800 | 250 | 3.5 | 35 | 0.4 | 0.12 | 100 |
| 1 | 189 100.1 | 250 | 4 | 35 | 0.4 | 0.12 | 100 |
| 1.25 | 189 100.1.25 | 250 | 5 | 35 | 0.4 | 0.12 | 100 |
| 1.6 | 189 100.1.6 | 200 | 10 | 35 | 0.5 | 0.12 | 100 |
| 2 | 189 100.2 | 200 | 16 | 35 | 0.6 | 0.12 | 100 |
| 2.5 | 189 100.2.5 | 200 | 24 | 35 | 0.7 | 0.12 | 100 |
| 3.15 | 189 100.3.15 | 200 | 42 | 35 | 0.8 | 0.12 | 100 |
| 4 | 189 100.4 | 200 | 70 | 40 | 1.0 | 0.12 | 100 |
| 5 | 189 100.5 | 200 | 130 | 50 | 1.3 | 0.12 | 100 |
| 6.3 | 189 100.6.3 | 200 | 230 | 63 | 1.6 | 0.12 | 100 |
| 8 ¹ | 189 100.8 | 200 | 370 | 80 | 2.0 | 0.12 | 100 |
| 10 ¹ | 189 100.10 | 150 | 630 | 100 | 2.3 | 0.12 | 100 |
| 12.5 ¹ | 189 100.12.5 | 150 | 820 | 125 | 2.8 | 0.12 | 100 |
| 16 ¹ | 189 100.16 | 150 | 1 200 | 160 | 3.0 | 0.12 | 100 |
| 20 ¹ | 189 100.20 | 150 | 1 600 | 200 | 4.0 | 0.12 | 100 |

¹ Consideration should be given to heat dissipation, 6.3A and up.



Pre-Arcing Time Limits

| Rated Current | 1.15 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|---------------------|--------------------|---------------------|------------------|-------------------|
| 50 mA | > 1 h | 800 ms | 200 ms | 80 ms | 15 ms |
| 20 A | | 30 s | 6 s | 2 s | 300 ms |





Miniature Fuses

Ceramic Tube

T

Size
6.3 x 32 mm

Rated Voltage
500 V

Time Lag

Standard
Not Standardized

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | cURus UR | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-------------|-----------------|------|
| 0.100 | 189 140.0.100 | 3 600 | 0.05 | 1 500 ¹ | 1.3 | ✓ ✓ | 0.24 | 100 |
| 0.125 | 189 140.0.125 | 3 400 | 0.08 | 1 500 ¹ | 1.4 | ✓ ✓ | 0.24 | 100 |
| 0.160 | 189 140.0.160 | 3 000 | 0.12 | 1 500 ¹ | 1.5 | ✓ ✓ | 0.24 | 100 |
| 0.200 | 189 140.0.200 | 2 500 | 0.20 | 1 500 ¹ | 1.6 | ✓ ✓ | 0.24 | 100 |
| 0.250 | 189 140.0.250 | 2 000 | 0.35 | 1 500 ¹ | 1.7 | ✓ ✓ | 0.24 | 100 |
| 0.315 | 189 140.0.315 | 1 800 | 0.50 | 1 500 ¹ | 1.8 | ✓ ✓ | 0.24 | 100 |
| 0.400 | 189 140.0.400 | 1 600 | 0.80 | 1 500 ¹ | 2.0 | ✓ ✓ | 0.24 | 100 |
| 0.500 | 189 140.0.500 | 450 | 0.32 | 1 500 ¹ | 0.6 | ✓ ✓ | 0.24 | 100 |
| 0.630 | 189 140.0.630 | 400 | 0.60 | 1 500 ¹ | 0.7 | ✓ ✓ | 0.24 | 100 |
| 0.800 | 189 140.0.800 | 350 | 1.0 | 1 500 ¹ | 0.8 | ✓ ✓ | 0.24 | 100 |
| 1 | 189 140.1 | 350 | 1.5 | 1 500 ¹ | 0.9 | ✓ ✓ | 0.24 | 100 |
| 1.25 | 189 140.1.25 | 300 | 3.1 | 1 500 ¹ | 1.0 | ✓ ✓ | 0.24 | 100 |
| 1.6 | 189 140.1.6 | 200 | 5.2 | 1 500 ¹ | 1.1 | ✓ ✓ | 0.24 | 100 |
| 2 | 189 140.2 | 180 | 10 | 1 500 ¹ | 1.2 | ✓ ✓ | 0.24 | 100 |
| 2.5 | 189 140.2.5 | 160 | 19 | 1 500 ¹ | 1.3 | ✓ ✓ | 0.24 | 100 |
| 3.15 | 189 140.3.15 | 150 | 37 | 1 500 ¹ | 1.4 | ✓ ✓ | 0.24 | 100 |
| 4 | 189 140.4 | 140 | 68 | 1 500 ¹ | 1.5 | ✓ ✓ | 0.24 | 100 |
| 5 | 189 140.5 | 135 | 80 | 1 500 ¹ | 2.2 | ✓ ✓ | 0.24 | 100 |
| 6.3 | 189 140.6.3 | 110 | 215 | 1 500 ¹ | 2.2 | ✓ ✓ | 0.24 | 100 |
| 8 | 189 140.8 | 110 | 370 | 1 500 ¹ | 2.6 | ✓ ✓ | 0.24 | 100 |
| 10 | 189 140.10 | 100 | 620 | 1 500 ¹ | 3.0 | ✓ ✓ | 0.24 | 100 |
| 12.5 | 189 140.12.5 | 100 | 1 300 | 1 500 ² | 3.5 | ✓ ✓ | 0.24 | 100 |
| 16 | 189 140.16 | 100 | 2 500 | 1 500 ² | 4.0 | ✓ ✓ | 0.24 | 100 |

Size
6.3 x 32 mm

Rated Voltage
440 V

Time Lag

Standard
Not Standardized

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | cURus UR | Weight [kg/100] | Pack |
|-------------------|------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-------------|-----------------|------|
| 20 | 189 140.20 | 100 | 3 400 | 1 500 ² | 6 | | 0.24 | 100 |
| 25 | 189 140.25 | 100 | 5 600 | 1 500 ² | 8 | | 0.24 | 100 |

Size
6.3 x 32 mm

Rated Voltage
250 V

Time Lag

Standard
Not Standardized

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | cURus UR | Weight [kg/100] | Pack |
|-------------------|------------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-------------|-----------------|------|
| 32 | 189 140.32 | 80 | 3 900 | 1 500 ² | 10 | | 0.24 | 100 |

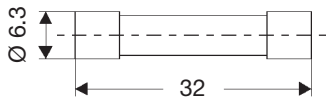
Consideration should be given to heat dissipation for 6.3A and up.

¹⁾ @ 1.5kA – cos φ=1, 10kA @440 V_{AC} – cosφ=0.3, 1.5kA @ 400 V_{DC} and ²⁾ cosφ=1



Miniature Fuses Ceramic Tube

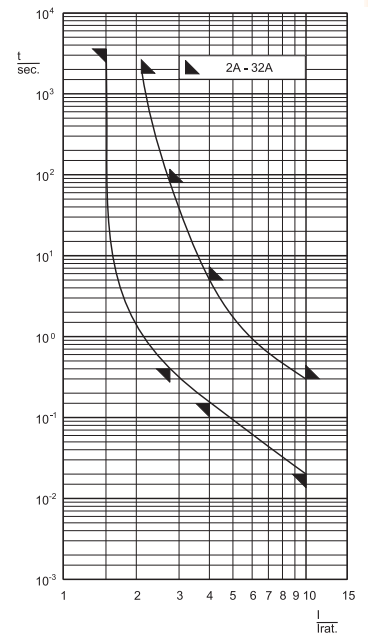
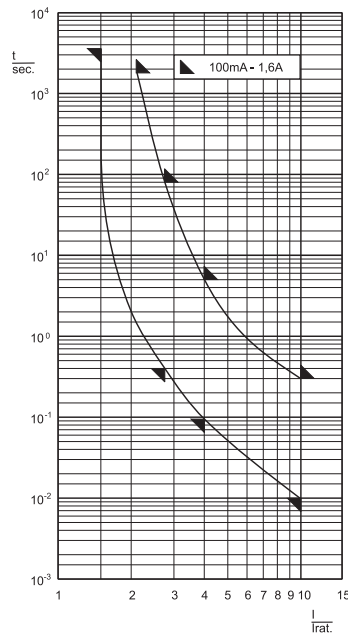
T



Pre-Arcing Time Limits

| Rated Current | $1.5 I_n$ | $2.1 I_n$ | $2.75 I_n$ | $4 I_n$ | $10 I_n$ |
|---------------|-----------|-----------|------------|---------|----------|
| 100 mA | 1 h | 30 min. | 400 ms | 95 ms | 10 ms |
| 1.6 A | | | | 5 s | 300 ms |
| 2 A | | | | 150 ms | 20 ms |
| 32 A | | | | 5 s | 300 ms |
| | | | | 80 s | |

189.140





Miniature Fuses

Glass Tube

T

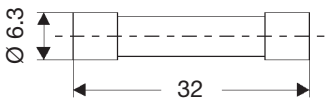
Size **6.3 x 32 mm** Rated Voltage **250 V** Time Lag Standard **Not Standardized**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² ts-value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | cULus | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-------------------------------------------------------|-----------------------------|-----------------------|-------|-----------------|------|
| 0.300 | 189 500.0.300 | 870 | 1.5 | 35 ¹ | 0.6 | ✓ | 0.1 | 100 |
| 0.375 | 189 500.0.375 | 840 | 2.5 | 35 ¹ | 0.6 | ✓ | 0.1 | 100 |
| 0.400 | 189 500.0.400 | 730 | 2.5 | 35 ¹ | 0.6 | ✓ | 0.1 | 100 |
| 0.500 | 189 500.0.500 | 660 | 5.4 | 35 ¹ | 0.6 | ✓ | 0.1 | 100 |
| 0.600 | 189 500.0.600 | 600 | 3.1 | 35 ¹ | 0.6 | ✓ | 0.1 | 100 |
| 0.700 | 189 500.0.700 | 580 | 4.5 | 35 ¹ | 0.7 | ✓ | 0.1 | 100 |
| 0.800 | 189 500.0.800 | 500 | 6.4 | 35 ¹ | 0.7 | ✓ | 0.1 | 100 |
| 1 | 189 500.1 | 450 | 13 | 35 ¹ | 0.7 | ✓ | 0.1 | 100 |
| 1.25 | 189 500.1.25 | 400 | 19 | 100 ¹ | 0.7 | ✓ | 0.1 | 100 |
| 1.5 | 189 500.1.5 | 370 | 25 | 100 ¹ | 0.8 | ✓ | 0.1 | 100 |
| 1.6 | 189 500.1.6 | 350 | 32 | 100 ¹ | 0.8 | ✓ | 0.1 | 100 |
| 2 | 189 500.2 | 330 | 55 | 100 ¹ | 0.9 | ✓ | 0.1 | 100 |
| 2.5 | 189 500.2.5 | 290 | 90 | 100 ¹ | 0.9 | ✓ | 0.1 | 100 |
| 2.8 | 189 500.2.8 | 270 | 120 | 100 ¹ | 1.0 | ✓ | 0.1 | 100 |
| 3 | 189 500.3 | 250 | 160 | 100 ¹ | 1.0 | ✓ | 0.1 | 100 |
| 3.2 | 189 500.3.2 | 220 | 350 | 100 ¹ | 1.0 | ✓ | 0.1 | 100 |

Size **6.3 x 32 mm** Rated Voltage **125 V** Time Lag Standard **Not Standardized**

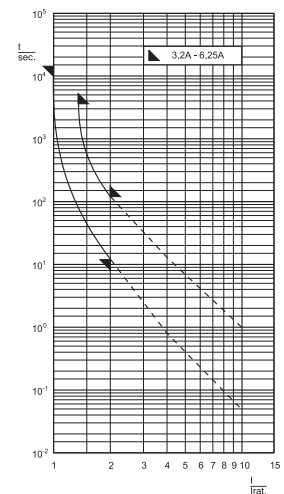
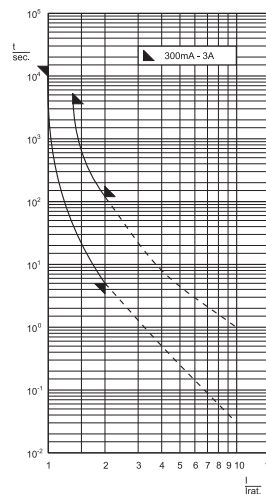
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² ts-value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | cULus | Weight [kg/100] | Pack |
|-------------------|-------------|-------------------|-------------------------------------------------------|-----------------------------|-----------------------|-------|-----------------|------|
| 4 | 189 500.4 | 200 | 590 | 100 ¹ | 1.1 | ✓ | 0.1 | 100 |
| 5 | 189 500.5 | 200 | 600 | 100 ¹ | 1.3 | ✓ | 0.1 | 100 |
| 6.25 | 189 500.6.3 | 200 | 1 300 | 100 ¹ | 1.7 | ✓ | 0.1 | 100 |

¹ 10.000 A @ 125 V AC



Pre-Arcing Time Limits

| Rated Current | 1.0 I _n | 1.35 I _n | 2.0 I _n |
|----------------|--------------------|---------------------|--------------------|
| 300 mA | | | 5 s |
| 3.2 A (250 V) | - | > 4 h | < 1 h |
| 4 A | | | 12 s |
| 6.25 A (125 V) | | | 120 s |





Miniature Fuses

Ceramic Tube

FF

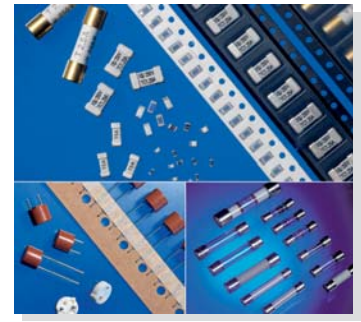
Size **6.3 x 32 mm** Rated Voltage **700 V** **Very Fast Acting** Standard **Not Standardized**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² ts-value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | cURus | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|-------------------------------------------------------|------------------------------|-----------------------|-------|-----------------|------|
| 0.100 | 70 125 40.0.100 | 2 500 | 0.0009 | 50 | 0.3 | ✓ | 0.24 | 100 |
| 0.125 | 70 125 40.0.125 | 2 200 | 0.0017 | 50 | 0.3 | ✓ | 0.24 | 100 |
| 0.160 | 70 125 40.0.160 | 2 000 | 0.004 | 50 | 0.5 | ✓ | 0.24 | 100 |
| 0.200 | 70 125 40.0.200 | 1 600 | 0.008 | 50 | 0.6 | ✓ | 0.24 | 100 |
| 0.250 | 70 125 40.0.250 | 1 500 | 0.024 | 50 | 0.7 | ✓ | 0.24 | 100 |
| 0.315 | 70 125 40.0.315 | 1 350 | 0.035 | 50 | 0.7 | ✓ | 0.24 | 100 |
| 0.400 | 70 125 40.0.400 | 1 030 | 0.07 | 50 | 0.8 | ✓ | 0.24 | 100 |
| 0.500 | 70 125 40.0.500 | 950 | 0.14 | 50 | 0.8 | ✓ | 0.24 | 100 |
| 0.630 | 70 125 40.0.630 | 860 | 0.14 | 50 | 0.9 | ✓ | 0.24 | 100 |
| 0.800 | 70 125 40.0.800 | 760 | 0.22 | 50 | 1.0 | ✓ | 0.24 | 100 |
| 1 | 70 125 40.1 | 1 100 | 0.14 | 50 | 1.3 | ✓ | 0.24 | 100 |
| 1.25 | 70 125 40.1.25 | 1 000 | 0.22 | 50 | 1.6 | ✓ | 0.24 | 100 |
| 1.6 | 70 125 40.1.6 | 900 | 0.31 | 50 | 1.9 | ✓ | 0.24 | 100 |
| 2 | 70 125 40.2 | 800 | 0.64 | 50 | 2.4 | ✓ | 0.24 | 100 |

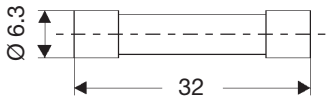
Size **6.3 x 32 mm** Rated Voltage **500 V** **Very Fast Acting** Standard **Not Standardized**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² ts-value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | cURus | Weight [kg/100] | Pack |
|-------------------|----------------|-------------------|-------------------------------------------------------|------------------------------|-----------------------|-------|-----------------|------|
| 2.5 | 70 125 40.2.5 | 800 | 1.2 | 50 | 2.7 | ✓ | 0.24 | 100 |
| 3.15 | 70 125 40.3.15 | 700 | 2 | 50 | 3.0 | ✓ | 0.24 | 100 |
| 4 | 70 125 40.4 | 500 | 5 | 50 | 3.2 | ✓ | 0.24 | 100 |
| 5 | 70 125 40.5 | 400 | 10 | 50 | 3.6 | ✓ | 0.24 | 100 |
| 6.3 | 70 125 40.6.3 | 400 | 3 | 50 | 4.0 | ✓ | 0.24 | 100 |
| 8 ¹ | 70 125 40.8 | 350 | 6.5 | 50 | 4.5 | ✓ | 0.24 | 100 |
| 10 ¹ | 70 125 40.10 | 350 | 12 | 50 | 5.0 | ✓ | 0.24 | 100 |
| 12.5 ¹ | 70 125 40.12.5 | 300 | 18 | 50 | 7.0 | ✓ | 0.24 | 100 |
| 16 ¹ | 70 125 40.16 | 300 | 31 | 50 | 9.0 | ✓ | 0.24 | 100 |
| 20 ¹ | 70 125 40.20 | 300 | 46 | 50 | 13 | ✓ | 0.24 | 100 |

¹ Consideration should be given to heat dissipation.



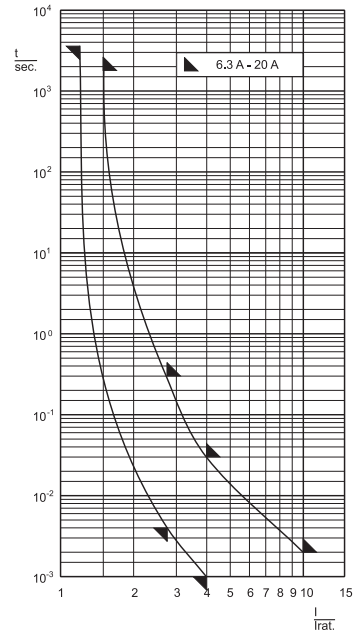
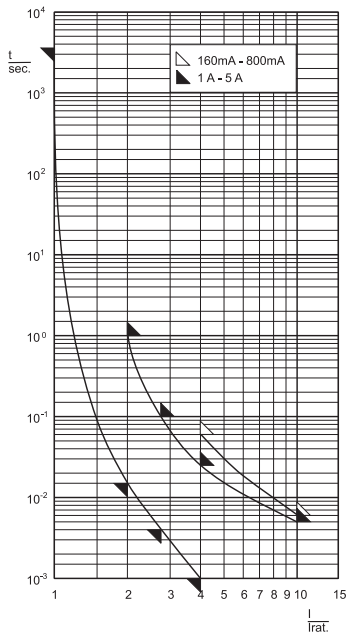
Miniature Fuses
Ceramic Tube **FF**



Pre-Arcing Time Limits

| Rated Current | 1.0 I _{rat} | 1.2 I _{rat} | 2.75 I _{rat} | 4 I _{rat} | 10 I _{rat} |
|-----------------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 160 mA ▼ 800 mA | > 1 h | - | - | < 60 ms | < 6 ms |
| 1 A ▼ 5 A | | - | 4 ms ▼ 150 ms | 1 ms ▼ 25 ms | < 5 ms |
| Rated Current | 1.2 I _{rat} | 1.5 I _{rat} | 2.75 I _{rat} | 4 I _{rat} | 10 I _{rat} |
| 6.3 A ▼ 20 A | | > 1 h | 4 ms ▼ 300 ms | 1 ms ▼ 30 ms | < 2 ms |

70.125.40





Miniature Fuses
For Short Circuit Protection Ceramic Tube

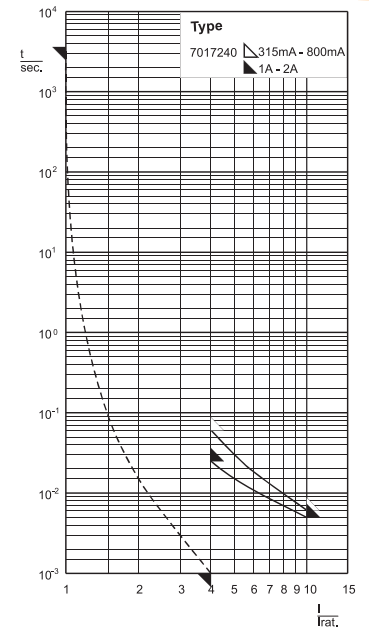
aR (FF)

Size **6.3 x 32 mm** Rated Voltage **1000 V** **Very Fast Acting** Standard

| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [kA] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|--------------------------------------------------------------------|------------------------------|-----------------------|-----------------|------|
| 0.315 | 70 172 40.0.315 | 700 | 0.035 | 50 | 0.3 | 0.12 | 100 |
| 0.400 | 70 172 40.0.400 | 650 | 0.07 | 50 | 0.3 | 0.12 | 100 |
| 0.500 | 70 172 40.0.500 | 650 | 0.15 | 50 | 0.4 | 0.12 | 100 |
| 0.630 | 70 172 40.0.630 | 650 | 0.15 | 50 | 0.5 | 0.12 | 100 |
| 0.800 | 70 172 40.0.800 | 600 | 0.32 | 50 | 0.5 | 0.12 | 100 |
| 1 | 70 172 40.1 | 750 | 0.32 | 50 | 0.8 | 0.12 | 100 |
| 1.6 | 70 172 40.1.6 | 650 | 0.31 | 50 | 1.1 | 0.12 | 100 |
| 2 | 70 172 40.2 | 650 | 0.64 | 30 | 1.4 | 0.12 | 100 |

Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 315 mA | > 1 h | - | - | < 60 ms | < 6 ms |
| 800 mA | | | | < 6 ms | |
| 1 A | | | | 1 ms | < 6 ms |
| 2 A | | | | 25 ms | |





Miniature Fuses with Indicator
Ceramic Tube

F

Size
5 x 25 mm

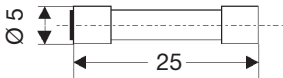
Rated Voltage
250 V

Fast Acting

Standard
DIN 41576 Part 1

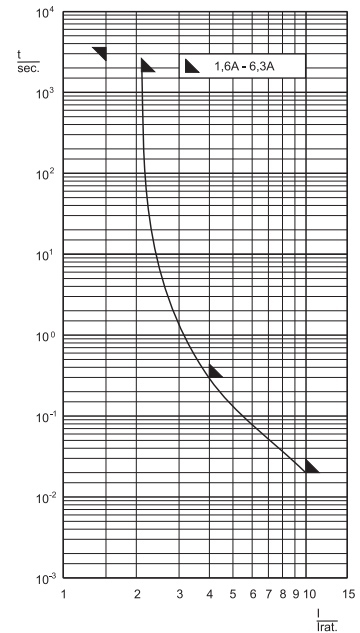
| Rated Current [A] | Part No. | Voltage Drop [mV] | Color Code | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|--------------|-------------------|------------|-----------------------------|-----------------|------|
| 1.6 | 171 526.1.6 | 640 | orange | 1 500 | 0.13 | 100 |
| 2 | 171 526.2 | 420 | blue | 1 500 | 0.13 | 100 |
| 2.5 | 171 526.2.5 | 320 | yellow | 1 500 | 0.13 | 100 |
| 3.15 | 171 526.3.15 | 250 | black | 1 500 | 0.13 | 100 |
| 4 | 171 526.4 | 200 | brown | 1 500 | 0.13 | 100 |
| 5 | 171 526.5 | 180 | white | 1 500 | 0.13 | 100 |
| 6.3 | 171 526.6.3 | 170 | green | 1 500 | 0.13 | 100 |
| (8) | 171 526.8 | 150 | grey | 1 500 | 0.13 | 100 |
| (10) | 171 526.10 | 120 | red | 1 500 | 0.13 | 100 |

(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 1.6 A ▼ 6.3 A | > 1 h | < 30 min. | - | < 300 ms | < 20 ms |





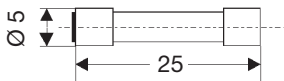
Miniature Fuses with Indicator Ceramic Tube

M

Size **5 x 25 mm** Rated Voltage **250 V** Medium Time Lag Standard **DIN 41576 Part 2**

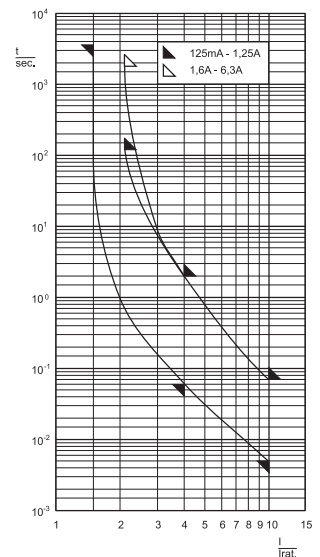
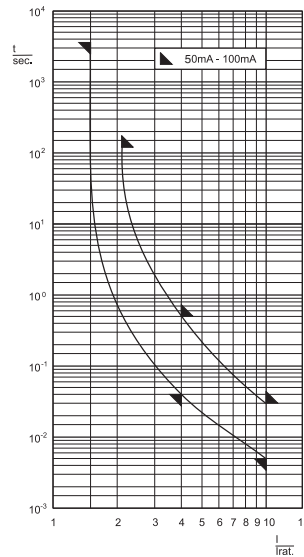
| Rated Current [A] | Part No. | Voltage Drop [mV] | Color Code | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|------------|-----------------------------|-----------------|------|
| 0.050 | 172 526.0.050 | 520 | white | 80 | 0.15 | 100 |
| 0.063 | 172 526.0.063 | 520 | green | 80 | 0.15 | 100 |
| 0.080 | 172 526.0.080 | 520 | grey | 80 | 0.15 | 100 |
| 0.100 | 172 526.0.100 | 500 | red | 80 | 0.15 | 100 |
| 0.125 | 172 526.0.125 | 500 | violet | 80 | 0.15 | 100 |
| 0.160 | 172 526.0.160 | 400 | orange | 80 | 0.15 | 100 |
| 0.200 | 172 526.0.200 | 400 | blue | 80 | 0.15 | 100 |
| 0.250 | 172 526.0.250 | 375 | yellow | 1 500 | 0.15 | 100 |
| 0.315 | 172 526.0.315 | 410 | black | 1 500 | 0.15 | 100 |
| 0.400 | 172 526.0.400 | 280 | brown | 1 500 | 0.15 | 100 |
| 0.500 | 172 526.0.500 | 250 | white | 1 500 | 0.15 | 100 |
| 0.630 | 172 526.0.630 | 220 | green | 1 500 | 0.15 | 100 |
| 0.800 | 172 526.0.800 | 400 | grey | 1 500 | 0.15 | 100 |
| 1 | 172 526.1 | 350 | red | 1 500 | 0.15 | 100 |
| 1.25 | 172 526.1.25 | 315 | lilac | 1 500 | 0.15 | 100 |
| 1.6 | 172 526.1.6 | 480 | orange | 1 500 | 0.15 | 100 |
| 2 | 172 526.2 | 360 | blue | 1 500 | 0.15 | 100 |
| 2.5 | 172 526.2.5 | 300 | yellow | 1 500 | 0.15 | 100 |
| 3.15 | 172 526.3.15 | 250 | black | 1 500 | 0.15 | 100 |
| 4 | 172 526.4 | 180 | brown | 1 500 | 0.15 | 100 |
| 5 | 172 526.5 | 180 | white | 1 500 | 0.15 | 100 |
| 6.3 | 172 526.6.3 | 160 | green | 1 500 | 0.15 | 100 |
| (8) | 172 526.8 | 160 | grey | 1 500 | 0.15 | 100 |
| (10) | 172 526.10 | 160 | red | 1 500 | 0.15 | 100 |

(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 50 mA | > 1 h | < 2 min. | - | 40 ms | 5 ms |
| 100 mA | | | | 500 ms | 30 ms |
| 125 mA | | | | | |
| 1.5 A | | | | 60 ms | 5 ms |
| 1.6 A | | | | 2 s | 70 ms |
| 6.3 A | | < 30 min. | | | |





Miniature Fuses with Indicator

Ceramic Tube

M

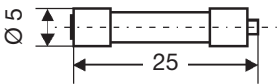
Size
5 x 25 mm

Rated Voltage
250 V

Medium Time Lag

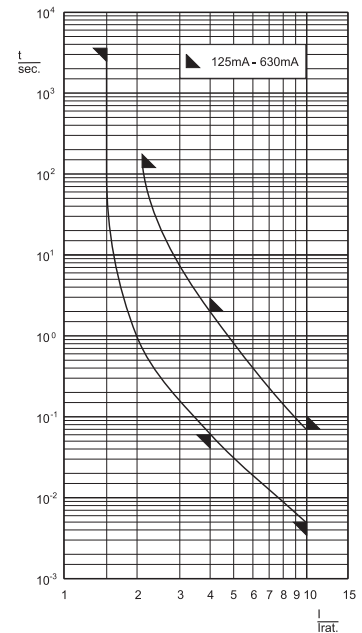
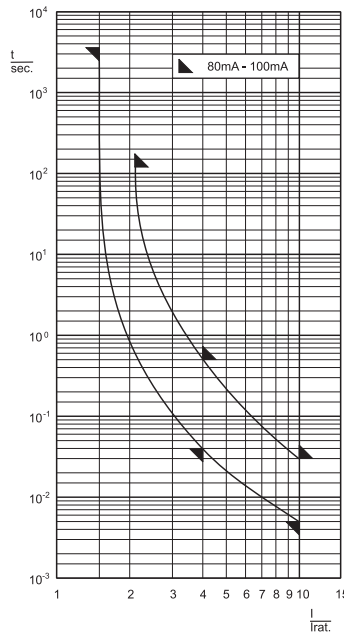
Standard
DIN 41577 Part 2

| Rated Current [A] | Part No. | Voltage Drop [mV] | Color Code | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|------------|-----------------------------|-----------------|------|
| 0.080 | 70 016 07.0.080 | 520 | grey | 80 | 0.15 | 100 |
| 0.100 | 70 016 07.0.100 | 500 | red | 80 | 0.15 | 100 |
| 0.125 | 70 016 07.0.125 | 500 | violet | 80 | 0.15 | 100 |
| 0.160 | 70 016 07.0.160 | 400 | orange | 80 | 0.15 | 100 |
| 0.200 | 70 016 07.0.200 | 400 | blue | 80 | 0.15 | 100 |
| 0.250 | 70 017 07.0.250 | 500 | yellow | 1 500 | 0.15 | 100 |
| 0.315 | 70 017 07.0.315 | 470 | black | 1 500 | 0.15 | 100 |
| 0.400 | 70 017 07.0.400 | 400 | brown | 1 500 | 0.15 | 100 |
| 0.500 | 70 017 07.0.500 | 400 | white | 1 500 | 0.15 | 100 |
| 0.630 | 70 017 07.0.630 | 380 | green | 1 500 | 0.15 | 100 |



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.0 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 80 mA | > 1 h < 2 min. | - | - | 40 ms | 5 ms |
| 100 mA | | | | 500 ms | 30 ms |
| 125 mA | | | | 60 ms | 5 ms |
| 630 mA | | | | 2 s | 70 ms |



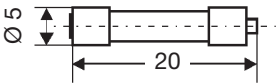


Miniature Fuses with Indicator
Ceramic Tube **M**

Size **5 x 20 mm** Rated Voltage **250 V** **Medium Time Lag** Standard **DIN 41577 Part 2**

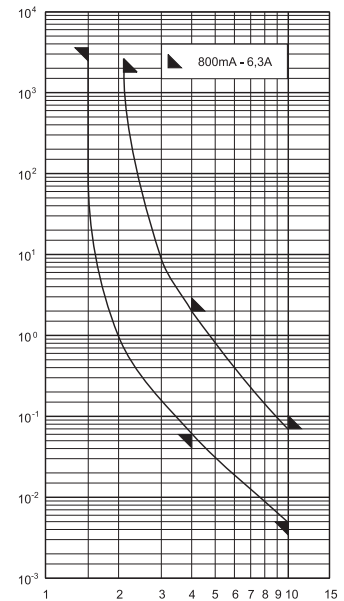
| Rated Current [A] | Part No. | Voltage Drop [mV] | Color Code | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|------------|-----------------------------|-----------------|------|
| 0.800 | 70 014 07.0.800 | 520 | grey | 1 500 | 0.15 | 100 |
| 1 | 70 014 07.1 | 470 | red | 1 500 | 0.15 | 100 |
| 1.25 | 70 014 07.1.25 | 400 | violet | 1 500 | 0.15 | 100 |
| 1.6 | 70 014 07.1.6 | 400 | orange | 1 500 | 0.15 | 100 |
| 2 | 70 014 07.2 | 380 | blue | 1 500 | 0.15 | 100 |
| 2.5 | 70 014 07.2.5 | 380 | yellow | 1 500 | 0.15 | 100 |
| 3.15 | 70 014 07.3.15 | 380 | black | 1 500 | 0.15 | 100 |
| 4 | 70 014 07.4 | 380 | brown | 1 500 | 0.15 | 100 |
| 6.3 ¹ | 70 012 05.6.3 | 380 | green | 1 500 | 0.15 | 100 |

¹ without fitting device



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 1.6 A | > 1 h | < 30 min. | - | 60 ms | 5 ms |
| 6.3 A | | | | 2 s | 70 ms |



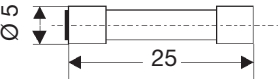


Miniature Fuses with Indicator
Ceramic Tube **F**

Size **5 x 25 mm** Rated Voltage **450 V** **Fast Acting** **Lloyds Registered**

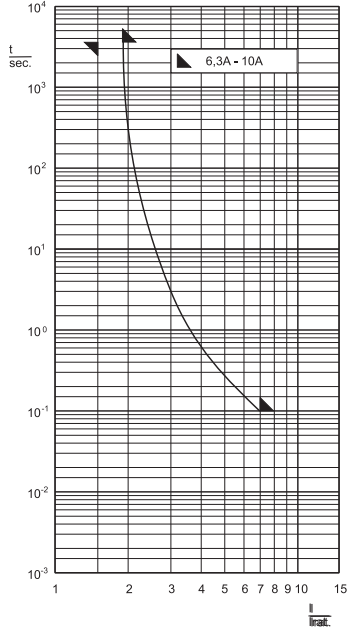
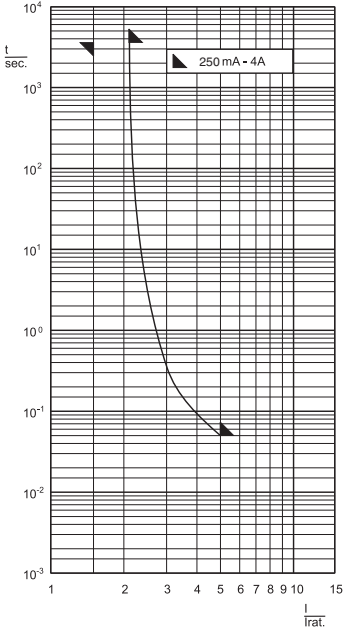
| Rated Current [A] | Part No. | Voltage Drop [mV] | Color Code | Rated Breaking Capacity [kA] | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|------------|------------------------------|-----------------|------|
| 0.250 | 70 089 13.0.250 | 980 | yellow | 70 | 0.13 | 100 |
| 0.315 | 70 089 13.0.315 | 900 | black | 70 | 0.13 | 100 |
| 0.400 | 70 089 13.0.400 | 800 | brown | 70 | 0.13 | 100 |
| 0.500 | 70 089 13.0.500 | 700 | white | 70 | 0.13 | 100 |
| 1 | 70 089 13.1 | 300 | red | 70 | 0.13 | 100 |
| 1.25 | 70 089 13.1.25 | 250 | violet | 70 | 0.13 | 100 |
| 1.6 | 70 089 13.1.6 | 400 | orange | 70 | 0.13 | 100 |
| 2 | 70 089 13.2 | 400 | blue | 70 | 0.13 | 100 |
| 2.5 | 70 089 13.2.5 | 350 | yellow | 70 | 0.13 | 100 |
| 3.15 | 70 089 13.3.15 | 300 | black | 70 | 0.13 | 100 |
| 4 | 70 089 13.4 | 200 | brown | 70 | 0.13 | 100 |
| 6.3 | 70 089 13.6.3 | 150 | green | 70 | 0.13 | 100 |
| 10 | 70 089 13.10 | 130 | red | 70 | 0.13 | 100 |

Note: Suitable fuse holder panel mounting Part No. 71.044.03 and screw cap Part No. 72.044.02 see catalogue MAR



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 1.9 I _n | 2.1 I _n | 5 I _n | 7 I _n |
|--------------------|--------------------|--------------------|--------------------|------------------|------------------|
| 250 mA ▼ 4 A | > 1 h | - | < 1 h | < 0.05 s | - |
| 6.3 A ▼ 10 A | | < 1 h | - | - | < 0.1 s |





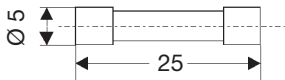
G

Miniature Fuses
Glass Tube

F

Size **5 x 25 mm** Rated Voltage **250 V** **Fast Acting** Standard **Not Standardized**

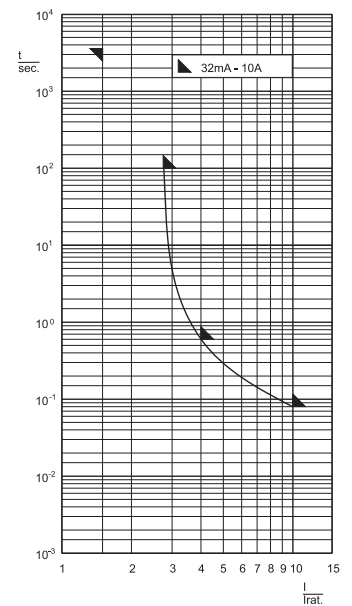
| Rated Current [A] | Part No. | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|----------------------|---------------|--------------------------------|--------------------|------|
| 0.032 | 171 525.0.032 | 50 | 0.12 | 100 |
| 0.050 | 171 525.0.050 | 50 | 0.12 | 100 |
| 0.063 | 171 525.0.063 | 50 | 0.12 | 100 |
| 0.080 | 171 525.0.080 | 50 | 0.12 | 100 |
| 0.100 | 171 525.0.100 | 50 | 0.12 | 100 |
| 0.125 | 171 525.0.125 | 50 | 0.12 | 100 |
| 0.160 | 171 525.0.160 | 50 | 0.12 | 100 |
| 0.200 | 171 525.0.200 | 50 | 0.12 | 100 |
| 0.250 | 171 525.0.250 | 50 | 0.12 | 100 |
| 0.315 | 171 525.0.315 | 50 | 0.12 | 100 |
| 0.400 | 171 525.0.400 | 50 | 0.12 | 100 |
| 0.500 | 171 525.0.500 | 50 | 0.12 | 100 |
| 0.630 | 171 525.0.630 | 50 | 0.12 | 100 |
| 0.800 | 171 525.0.800 | 50 | 0.12 | 100 |
| 1 | 171 525.1 | 50 | 0.12 | 100 |
| 1.25 | 171 525.1.25 | 50 | 0.12 | 100 |
| 1.6 | 171 525.1.6 | 80 | 0.12 | 100 |
| 2 | 171 525.2 | 80 | 0.12 | 100 |
| 2.5 | 171 525.2.5 | 80 | 0.12 | 100 |
| 3.15 | 171 525.3.15 | 80 | 0.12 | 100 |
| 4 | 171 525.4 | 80 | 0.12 | 100 |
| 5 | 171 525.5 | 80 | 0.12 | 100 |
| 6.3 | 171 525.6.3 | 80 | 0.12 | 100 |
| 8 | 171 525.8 | 80 | 0.12 | 100 |
| 10 | 171 525.10 | 80 | 0.12 | 100 |

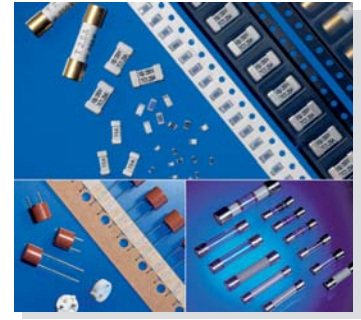


Pre-Arcing Time Limits

Part No. 171 525

| Rated Current | 1.5 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|--------------------|--------------------|---------------------|------------------|-------------------|
| 32 mA ↓ 10 A | > 1 h | < 100 s | < 600 ms | < 80 ms |





Miniature Fuses
Glass Tube

M

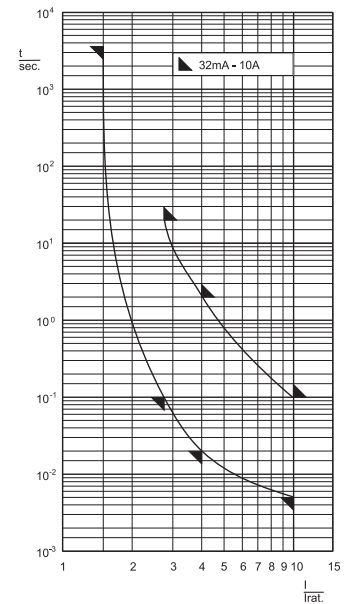
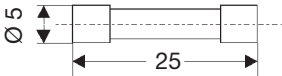
Size
5 x 25 mm

Rated Voltage
250 V

Medium Time Lag

Standard
Not standardized

| Rated Current [A] | Part No. | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|----------------------|---------------|--------------------------------|--------------------|------|
| 0.032 | 172 525.0.032 | 50 | 0.12 | 100 |
| 0.050 | 172 525.0.050 | 50 | 0.12 | 100 |
| 0.063 | 172 525.0.063 | 50 | 0.12 | 100 |
| 0.080 | 172 525.0.080 | 50 | 0.12 | 100 |
| 0.100 | 172 525.0.100 | 50 | 0.12 | 100 |
| 0.125 | 172 525.0.125 | 50 | 0.12 | 100 |
| 0.160 | 172 525.0.160 | 50 | 0.12 | 100 |
| 0.200 | 172 525.0.200 | 50 | 0.12 | 100 |
| 0.250 | 172 525.0.250 | 50 | 0.12 | 100 |
| 0.315 | 172 525.0.315 | 50 | 0.12 | 100 |
| 0.400 | 172 525.0.400 | 50 | 0.12 | 100 |
| 0.500 | 172 525.0.500 | 50 | 0.12 | 100 |
| 0.630 | 172 525.0.630 | 50 | 0.12 | 100 |
| 0.800 | 172 525.0.800 | 50 | 0.12 | 100 |
| 1 | 172 525.1 | 50 | 0.12 | 100 |
| 1.25 | 172 525.1.25 | 50 | 0.12 | 100 |
| 1.6 | 172 525.1.6 | 80 | 0.12 | 100 |
| 2 | 172 525.2 | 80 | 0.12 | 100 |
| 2.5 | 172 525.2.5 | 80 | 0.12 | 100 |
| 3.15 | 172 525.3.15 | 80 | 0.12 | 100 |
| 4 | 172 525.4 | 80 | 0.12 | 100 |
| 5 | 172 525.5 | 80 | 0.12 | 100 |
| 6.3 | 172 525.6.3 | 80 | 0.12 | 100 |
| 8 | 172 525.8 | 80 | 0.12 | 100 |
| 10 | 172 525.10 | 80 | 0.12 | 100 |



Pre-Arcing Time Limits

Part No. 172 525

| Rated Current | 1.5 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|---------------------|------------------|-------------------|
| 32 mA | > 1 h | 100 ms | 20 ms | 5 ms |
| 10 A | | 20 s | 2 s | 100 ms |

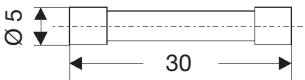


Miniature Fuses
Glass Tube > 1.25 A with Filling

F

Size **5 x 30 mm** Rated Voltage **500 V** **Fast Acting** Standard **Not Standardized**

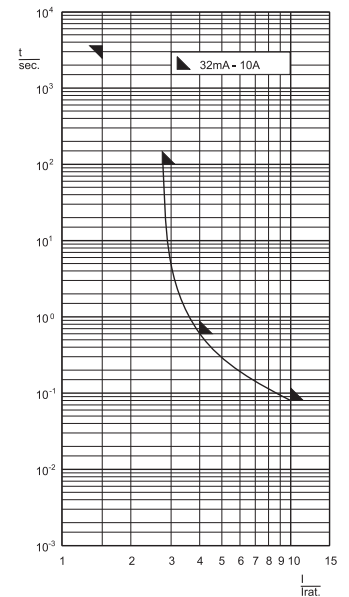
| Rated Current [A] | Part No. | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|----------------------|---------------|--------------------------------|--------------------|------|
| 0.032 | 171 530.0.032 | 50 | 0.12 | 100 |
| 0.050 | 171 530.0.050 | 50 | 0.12 | 100 |
| 0.063 | 171 530.0.063 | 50 | 0.12 | 100 |
| 0.080 | 171 530.0.080 | 50 | 0.12 | 100 |
| 0.100 | 171 530.0.100 | 50 | 0.12 | 100 |
| 0.125 | 171 530.0.125 | 50 | 0.12 | 100 |
| 0.160 | 171 530.0.160 | 50 | 0.12 | 100 |
| 0.200 | 171 530.0.200 | 50 | 0.12 | 100 |
| 0.250 | 171 530.0.250 | 50 | 0.12 | 100 |
| 0.315 | 171 530.0.315 | 50 | 0.12 | 100 |
| 0.400 | 171 530.0.400 | 50 | 0.12 | 100 |
| 0.500 | 171 530.0.500 | 50 | 0.12 | 100 |
| 0.630 | 171 530.0.630 | 50 | 0.12 | 100 |
| 0.800 | 171 530.0.800 | 50 | 0.12 | 100 |
| 1 | 171 530.1 | 50 | 0.12 | 100 |
| 1.25 | 171 530.1.25 | 50 | 0.12 | 100 |
| 1.6 | 171 530.1.6 | 80 | 0.12 | 100 |
| 2 | 171 530.2 | 80 | 0.12 | 100 |
| 2.5 | 171 530.2.5 | 80 | 0.12 | 100 |
| 3.15 | 171 530.3.15 | 80 | 0.12 | 100 |
| 4 | 171 530.4 | 80 | 0.12 | 100 |
| 5 | 171 530.5 | 80 | 0.12 | 100 |
| 6.3 | 171 530.6.3 | 80 | 0.12 | 100 |
| 8 | 171 530.8 | 80 | 0.12 | 100 |
| 10 | 171 530.10 | 80 | 0.12 | 100 |

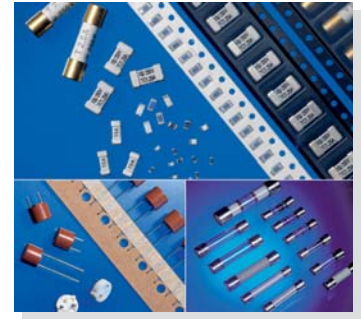


Pre-Arcing Time Limits

Part No. 171 530

| Rated Current | 1.5 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|--------------------|--------------------|---------------------|------------------|-------------------|
| 32 mA ▼ 10 A | > 1 h | < 100 s | < 600 ms | < 80 ms |





Miniature Fuses

Glass Tube > 1.25 A with Filling

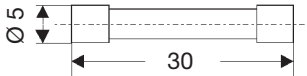
M

 Size
5 x 30 mm

 Rated Voltage
500 V
Medium Time Lag

 Standard
Not Standardized

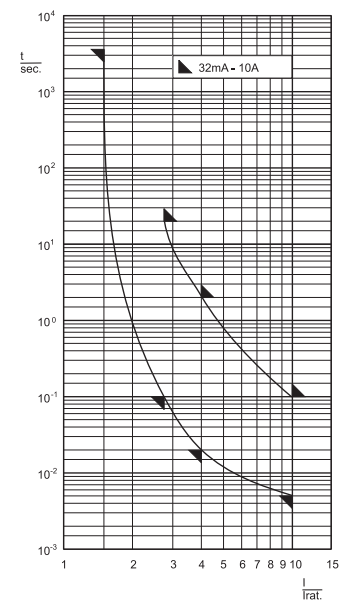
| Rated Current [A] | Part No. | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|----------------------|---------------|-----------------------------------|--------------------|------|
| 0.032 | 172 530.0.032 | 50 | 0.12 | 100 |
| 0.050 | 172 530.0.050 | 50 | 0.12 | 100 |
| 0.063 | 172 530.0.063 | 50 | 0.12 | 100 |
| 0.080 | 172 530.0.080 | 50 | 0.12 | 100 |
| 0.100 | 172 530.0.100 | 50 | 0.12 | 100 |
| 0.125 | 172 530.0.125 | 50 | 0.12 | 100 |
| 0.160 | 172 530.0.160 | 50 | 0.12 | 100 |
| 0.200 | 172 530.0.200 | 50 | 0.12 | 100 |
| 0.250 | 172 530.0.250 | 50 | 0.12 | 100 |
| 0.315 | 172 530.0.315 | 50 | 0.12 | 100 |
| 0.400 | 172 530.0.400 | 50 | 0.12 | 100 |
| 0.500 | 172 530.0.500 | 50 | 0.12 | 100 |
| 0.630 | 172 530.0.630 | 50 | 0.12 | 100 |
| 0.800 | 172 530.0.800 | 50 | 0.12 | 100 |
| 1 | 172 530.1 | 50 | 0.12 | 100 |
| 1.25 | 172 530.1.25 | 50 | 0.12 | 100 |
| 1.6 | 172 530.1.6 | 80 | 0.12 | 100 |
| 2 | 172 530.2 | 80 | 0.12 | 100 |
| 2.5 | 172 530.2.5 | 80 | 0.12 | 100 |
| 3.15 | 172 530.3.15 | 80 | 0.12 | 100 |
| 4 | 172 530.4 | 80 | 0.12 | 100 |
| 5 | 172 530.5 | 80 | 0.12 | 100 |
| 6.3 | 172 530.6.3 | 80 | 0.12 | 100 |
| 8 | 172 530.8 | 80 | 0.12 | 100 |
| 10 | 172 530.10 | 80 | 0.12 | 100 |



Pre-Arcing Time Limits

Part No. 172 530

| Rated Current | 1.5 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|---------------------|------------------|-------------------|
| 32 mA | | 50 ms | 20 ms | 5 ms |
| 10 A | > 1 h | 30 s | 2 s | 100 ms |





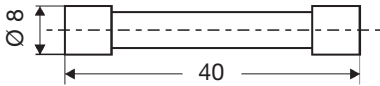
Miniature Fuses Glass Tube

M+F

Size **8 x 40 mm** Rated Voltage **500 V** Standard **DIN 41686**

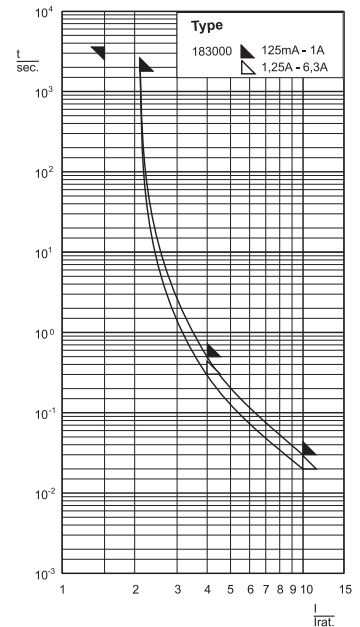
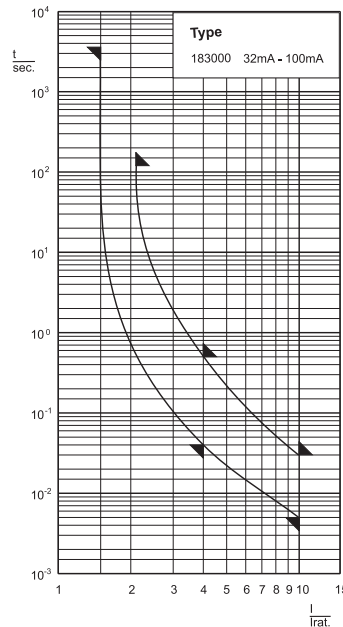
| Rated Current [A] | Part No. | Voltage Drop [mV] | Pre-arcing I ² t _s -value [A ² s] | Rated Breaking Capacity [A] | Power Dissipation [W] | Weight [kg/100] | Pack |
|-------------------|----------|-------------------|--------------------------------------------------------------------|-----------------------------|-----------------------|-----------------|------|
| M | 0.032 | 183 000.0.032 | 2 300 | * | 80 | * | 25 |
| | 0.050 | 183 000.0.050 | 1 600 | * | 80 | * | 25 |
| | 0.063 | 183 000.0.063 | 1 300 | * | 80 | * | 25 |
| | 0.080 | 183 000.0.080 | 950 | * | 80 | * | 25 |
| | 0.100 | 183 000.0.100 | 700 | * | 80 | * | 25 |
| F | 0.125 | 183 000.0.125 | 6 300 | 1 500 | * | 0.5 | 25 |
| | 0.160 | 183 000.0.160 | 4 700 | 1 500 | * | 0.5 | 25 |
| | 0.200 | 183 000.0.200 | 3 600 | 1 500 | * | 0.5 | 25 |
| | 0.250 | 183 000.0.250 | 2 800 | 1 500 | * | 0.5 | 25 |
| | 0.315 | 183 000.0.315 | 2 100 | 1 500 | * | 0.5 | 25 |
| | 0.400 | 183 000.0.400 | 1 600 | 1 500 | * | 0.5 | 25 |
| | 0.500 | 183 000.0.500 | 1 250 | 1 500 | * | 0.5 | 25 |
| | 0.630 | 183 000.0.630 | 1 000 | 1 500 | * | 0.5 | 25 |
| | 0.800 | 183 000.0.800 | 800 | 1 500 | * | 0.5 | 25 |
| | 1 | 183 000.1 | 620 | 1 500 | * | 0.5 | 25 |
| | 1.25 | 183 000.1.25 | 520 | 1 500 | * | 0.5 | 25 |
| | 1.6 | 183 000.1.6 | 450 | 1 500 | * | 0.5 | 25 |
| | 2 | 183 000.2 | 400 | 1 500 | * | 0.5 | 25 |
| | 2.5 | 183 000.2.5 | 370 | 1 500 | * | 0.5 | 25 |
| | 3.15 | 183 000.3.15 | 340 | 1 500 | * | 0.5 | 25 |
| | 4 | 183 000.4 | 320 | 1 500 | * | 0.5 | 25 |
| | 5 | 183 000.5 | 310 | 300 | * | 0.5 | 25 |
| | 6.3 | 183 000.6.3 | 300 | 300 | * | 0.5 | 25 |

* on request



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 2.75 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|---------------------|------------------|-------------------|
| 32 mA | > 1 h | < 2 min. | - | 40 ms | 5 ms |
| 100 mA | | | | 500 ms | 30 ms |
| 125 mA | > 1 h | < 30 min. | - | <400 ms | < 30 ms |
| 1 A | | | | < 300 ms | < 30 ms |
| 1.25 A | > 1 h | < 30 min. | - | <300 ms | < 30 ms |
| 6.3 A | | | | < 300 ms | < 30 ms |



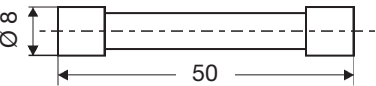


Miniature Fuses
Glass Tube > 100 mA Ceramic Tube

Size **8 x 50 mm** Rated Voltage **1.2 kV** Standard **DIN 41570**

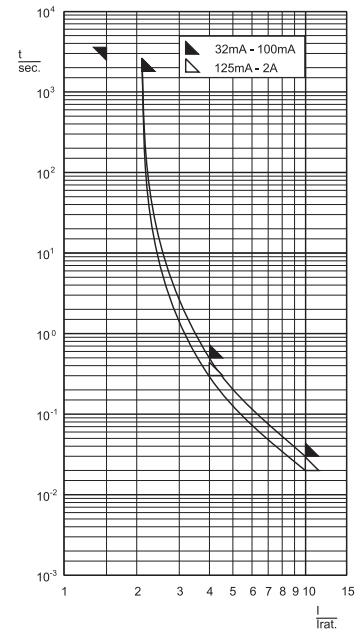
| Rated Current [A] | Part No. | Voltage Drop [mV] | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-----------------------------|-----------------|------|
| 0.032 | 184 000.0.032 | 2 300 | 35 | 0.35 | 50 |
| 0.050 | 184 000.0.050 | 1 900 | 35 | 0.35 | 50 |
| 0.063 | 184 000.0.063 | 1 700 | 35 | 0.35 | 50 |
| 0.080 | 184 000.0.080 | 1 500 | 35 | 0.35 | 50 |
| 0.100 | 184 000.0.100 | 1 300 | 35 | 0.35 | 50 |
| 0.125 | 184 000.0.125 | 9 500 | 35 | 0.68 | 50 |
| 0.160 | 184 000.0.160 | 8 000 | 35 | 0.68 | 50 |
| 0.200 | 184 000.0.200 | 7 000 | 35 | 0.68 | 50 |
| 0.250 | 184 000.0.250 | 6 000 | 35 | 0.68 | 50 |
| 0.315 | 184 000.0.315 | 5 000 | 35 | 0.68 | 50 |
| 0.400 | 184 000.0.400 | 2 000 | 35 | 0.68 | 50 |
| 0.500 | 184 000.0.500 | 950 | 35 | 0.68 | 50 |
| 0.630 | 184 000.0.630 | 860 | 35 | 0.68 | 50 |
| 0.800 | 184 000.0.800 | 760 | 35 | 0.68 | 50 |
| 1 | 184 000.1 | 640 | 35 | 0.68 | 50 |
| 1.25 | 184 000.1.25 | 540 | 35 | 0.68 | 50 |
| 1.6 | 184 000.1.6 | 500 | 35 | 0.68 | 50 |
| 2 | 184 000.2 | 460 | 35 | 0.68 | 50 |
| (2.5) | 184 000.2.5 | | 35 | 0.68 | 50 |
| (3.15) | 184 000.3.15 | | 35 | 0.68 | 50 |
| (4) | 184 000.4 | | 35 | 0.68 | 50 |
| (5) | 184 000.5 | | 35 | 0.68 | 50 |
| (6.3) | 184 000.6.3 | | 35 | 0.68 | 50 |

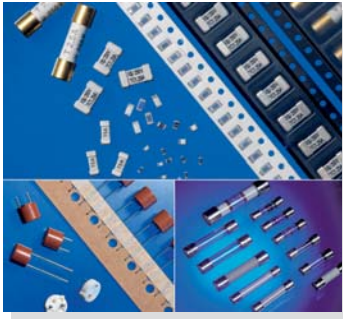
(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|------------------|-------------------|
| 32 mA | > 1 h | < 30 min. | < 500 ms | < 30 ms |
| 100 mA | | | | |
| 125 mA | > 1 h | < 30 min. | < 300 ms | < 20 ms |
| 2 A | | | | |



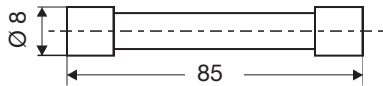


Miniature Fuses Ceramic Tube

Size **8 x 85 mm** Rated Voltage **3 kV** Standard **DIN 41569**

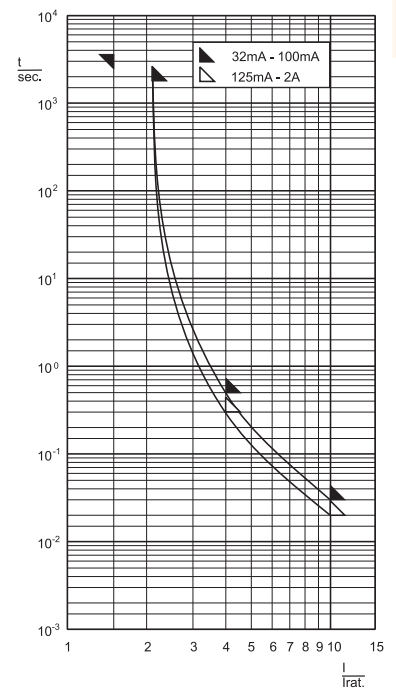
| Rated Current [A] | Part No. | Voltage Drop [mV] | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-----------------------------|-----------------|------|
| 0.032 | 185 000.0.032 | 4 500 | 35 | 0.43 | 50 |
| 0.050 | 185 000.0.050 | 3 000 | 35 | 0.43 | 50 |
| 0.063 | 185 000.0.063 | 2 400 | 35 | 0.43 | 50 |
| 0.080 | 185 000.0.080 | 1 900 | 35 | 0.43 | 50 |
| 0.100 | 185 000.0.100 | 1 500 | 35 | 0.43 | 50 |
| 0.125 | 185 000.0.125 | 17 000 | 35 | 0.84 | 50 |
| 0.160 | 185 000.0.160 | 14 000 | 35 | 0.84 | 50 |
| 0.200 | 185 000.0.200 | 12 000 | 35 | 0.84 | 50 |
| 0.250 | 185 000.0.250 | 10 500 | 35 | 0.84 | 50 |
| 0.315 | 185 000.0.315 | 9 000 | 35 | 0.84 | 50 |
| 0.400 | 185 000.0.400 | 3 500 | 35 | 0.84 | 50 |
| 0.500 | 185 000.0.500 | 1 600 | 35 | 0.84 | 50 |
| 0.630 | 185 000.0.630 | 1 500 | 35 | 0.84 | 50 |
| 0.800 | 185 000.0.800 | 1 300 | 35 | 0.84 | 50 |
| 1 | 185 000.1 | 1 200 | 35 | 0.84 | 50 |
| 1.25 | 185 000.1.25 | 1 000 | 35 | 0.84 | 50 |
| 1.6 | 185 000.1.6 | 900 | 35 | 0.84 | 50 |
| 2 | 185 000.2 | 800 | 35 | 0.84 | 50 |
| (2.5) | 185 000.2.5 | | 35 | 0.84 | 50 |
| (3.15) | 185 000.3.15 | | 35 | 0.84 | 50 |
| (4) | 185 000.4 | | 35 | 0.84 | 50 |

(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|------------------|-------------------|
| 32 mA | > 1 h | < 30 min. | < 500 ms | < 30 ms |
| 100 mA | | | < 300 ms | < 20 ms |
| 125 mA | | | | |
| 2 A | | | | |

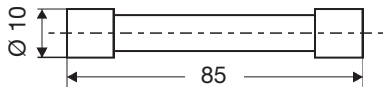




Miniature Fuses
Ceramic Tube

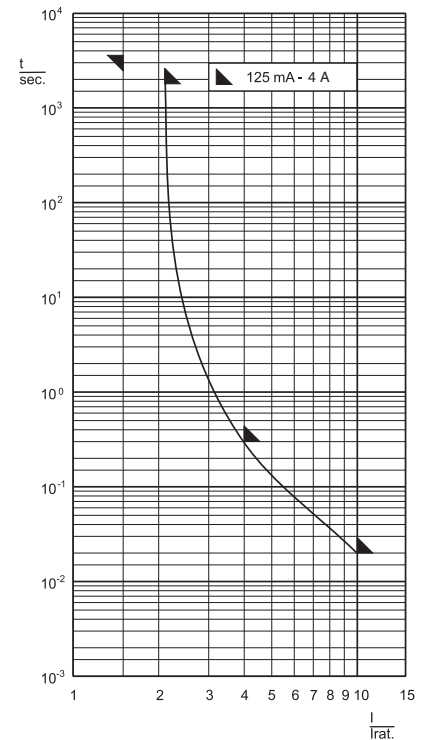
Size **10 x 85 mm** Rated Voltage **3 kV**

| Rated Current [A] | Part No. | Voltage Drop [mV] | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|-----------------|-------------------|-----------------------------|-----------------|------|
| 0.125 | 70 115 09.0.125 | 17 000 | on request | 1.4 | 10 |
| 0.160 | 70 115 09.0.160 | 14 000 | on request | 1.4 | 10 |
| 0.200 | 70 115 09.0.200 | 12 000 | on request | 1.4 | 10 |
| 0.250 | 70 115 09.0.250 | 10 500 | on request | 1.4 | 10 |
| 0.315 | 70 115 09.0.315 | 9 000 | on request | 1.4 | 10 |
| 0.400 | 70 115 09.0.400 | 3 500 | on request | 1.4 | 10 |
| 0.500 | 70 115 09.0.500 | 1 600 | on request | 1.4 | 10 |
| 0.630 | 70 115 09.0.630 | 1 500 | on request | 1.4 | 10 |
| 0.800 | 70 115 09.0.800 | 1 300 | on request | 1.4 | 10 |
| 1 | 70 115 09.1 | 1 200 | on request | 1.4 | 10 |
| 1.25 | 70 115 09.1.25 | 1 000 | on request | 1.4 | 10 |
| 1.6 | 70 115 09.1.6 | 900 | on request | 1.4 | 10 |
| 2 | 70 115 09.2 | 800 | on request | 1.4 | 10 |
| 2.5 | 70 115 09.2.5 | | on request | 1.4 | 10 |
| 3.15 | 70 115 09.3.15 | | on request | 1.4 | 10 |
| 4 | 70 115 09.4 | | on request | 1.4 | 10 |



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 4 I _n | 10 I _n |
|--------------------|--------------------|--------------------|------------------|-------------------|
| 125 mA ▼ 4 A | > 1 h | < 30 min. | < 0.3 s | < 20 ms |





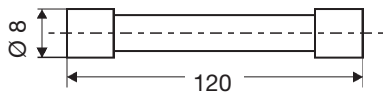
Miniature Fuses

Glass Tube > 100 mA Ceramic Tube

Size **8 x 120 mm** Rated Voltage **6 kV** Standard **DIN 41683**

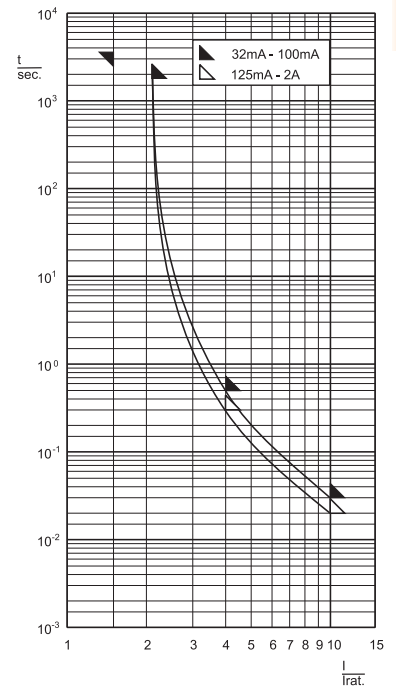
| Rated Current [A] | Part No. | Voltage Drop [mV] | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-----------------------------|-----------------|------|
| 0.032 | 186 000.0.032 | 6 000 | 35 | 0.52 | 50 |
| 0.050 | 186 000.0.050 | 4 400 | 35 | 0.52 | 50 |
| 0.063 | 186 000.0.063 | 3 800 | 35 | 0.52 | 50 |
| 0.080 | 186 000.0.080 | 3 200 | 35 | 0.52 | 50 |
| 0.100 | 186 000.0.100 | 2 900 | 35 | 0.52 | 50 |
| 0.125 | 186 000.0.125 | 22 000 | 35 | 1.00 | 50 |
| 0.160 | 186 000.0.160 | 19 000 | 35 | 1.00 | 50 |
| 0.200 | 186 000.0.200 | 16 000 | 35 | 1.00 | 50 |
| 0.250 | 186 000.0.250 | 14 000 | 35 | 1.00 | 50 |
| 0.315 | 186 000.0.315 | 12 000 | 35 | 1.00 | 50 |
| 0.400 | 186 000.0.400 | 5 000 | 35 | 1.00 | 50 |
| 0.500 | 186 000.0.500 | 2 300 | 35 | 1.00 | 50 |
| 0.630 | 186 000.0.630 | 2 000 | 35 | 1.00 | 50 |
| 0.800 | 186 000.0.800 | 1 900 | 35 | 1.00 | 50 |
| 1 | 186 000.1 | 1 800 | 35 | 1.00 | 50 |
| 1.25 | 186 000.1.25 | 1 400 | 35 | 1.00 | 50 |
| 1.6 | 186 000.1.6 | 1 300 | 35 | 1.00 | 50 |
| 2 | 186 000.2 | 1 100 | 35 | 1.00 | 50 |
| (2.5) | 186 000.2.5 | | 35 | 1.00 | 50 |
| (3.15) | 186 000.3.15 | | 35 | 1.00 | 50 |
| (4) | 186 000.4 | | 35 | 1.00 | 50 |

(...) = not standardized



Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|------------------|-------------------|
| 32 mA | > 1 h | < 30 min. | < 500 ms | < 30 ms |
| 100 mA | | | < 300 ms | < 20 ms |
| 125 mA | | | < 300 ms | < 20 ms |
| 2 A | | | | |





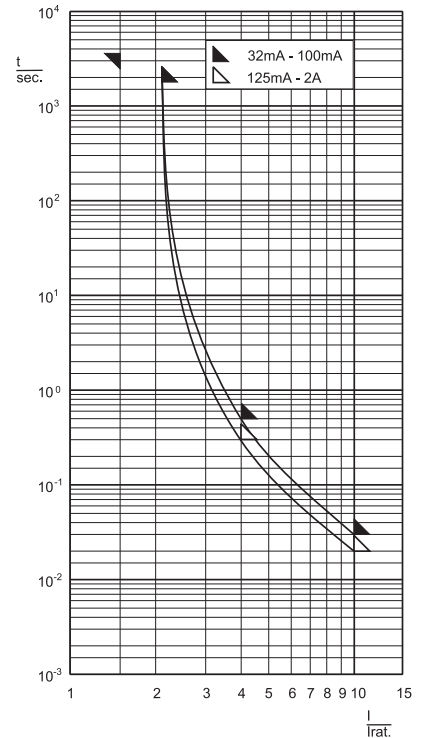
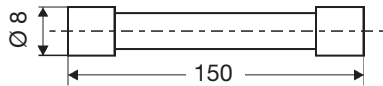
Miniature Fuses
Ceramic Tube

Size
8 x 150 mm

Rated Voltage
10 kV

Standard
DIN 41684

| Rated Current [A] | Part No. | Voltage Drop [mV] | Rated Breaking Capacity [A] | Weight [kg/100] | Pack |
|-------------------|---------------|-------------------|-----------------------------|-----------------|------|
| 0.032 | 187 000.0.032 | 14 000 | 35 | 0.70 | 50 |
| 0.050 | 187 000.0.050 | 8 500 | 35 | 0.70 | 50 |
| 0.063 | 187 000.0.063 | 6 500 | 35 | 0.70 | 50 |
| 0.080 | 187 000.0.080 | 5 000 | 35 | 0.70 | 50 |
| 0.100 | 187 000.0.100 | 4 000 | 35 | 0.70 | 50 |
| 0.125 | 187000.0.125 | 27 000 | 35 | 1.30 | 50 |
| 0.160 | 187 000.0.160 | 24 000 | 35 | 1.30 | 50 |
| 0.200 | 187 000.0.200 | 21 000 | 35 | 1.30 | 50 |
| 0.250 | 187 000.0.250 | 18 500 | 35 | 1.30 | 50 |
| 0.315 | 187 000.0.315 | 17 000 | 35 | 1.30 | 50 |
| 0.400 | 187 000.0.400 | 6 000 | 35 | 1.30 | 50 |
| 0.500 | 187 000.0.500 | 2 900 | 35 | 1.30 | 50 |
| 0.630 | 187 000.0.630 | 2 700 | 35 | 1.30 | 50 |
| 0.800 | 187 000.0.800 | 2 400 | 35 | 1.30 | 50 |
| 1 | 187 000.1 | 2 100 | 35 | 1.30 | 50 |
| 1.25 | 187 000.1.25 | 1 800 | 35 | 1.30 | 50 |
| 1.6 | 187 000.1.6 | 1 600 | 35 | 1.30 | 50 |
| 2 | 187 000.2 | 1 400 | 35 | 1.30 | 50 |

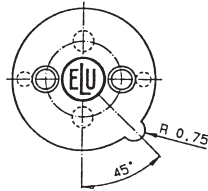
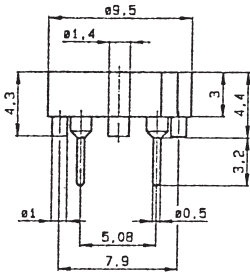


Pre-Arcing Time Limits

| Rated Current | 1.5 I _n | 2.1 I _n | 4 I _n | 10 I _n |
|---------------|--------------------|--------------------|------------------|-------------------|
| 32 mA | > 1 h | < 30 min. | < 500 ms | < 30 ms |
| 100 mA | | | < 300 ms | < 20 ms |
| 125 mA | | | < 300 ms | < 20 ms |
| 2 A | | | | |

Fuse-Holder Screw Cap For Sub Miniature Fuses Size **8.4 x 7.6 mm** Rated Current **6.3 A**

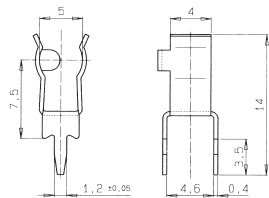
| Rated Voltage [V] | Part No. | Mounting | Pin Distance [mm] | Hole Ø [mm] | Connections |
|-------------------|----------|-----------------------|-------------------|-------------|-------------|
| 250 | 166 602 | Printed circuit board | 5.08 | 1 | Solder |



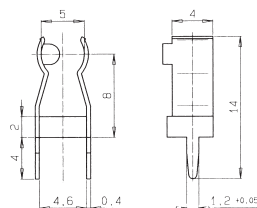
Fuse clips For Fuse-Links Cap Size **5 + 6.3 mm Ø** Rated Current **6.3 A** Other Types on Request

| Rated Voltage [V] | Part No. | Mounting | Material | Connections |
|-------------------|----------|-----------------------|---------------|-------------|
| 500 | 199 073 | Printed circuit board | Brass, tinned | Solder |
| 500 | 199 207 | Printed circuit board | Brass, tinned | Solder |
| 500 | 199 429 | Printed circuit board | Brass, tinned | Solder |
| 500 | 199 487 | Printed circuit board | Brass, tinned | Solder |
| 500 | 199 488 | Printed circuit board | Brass, tinned | Solder |

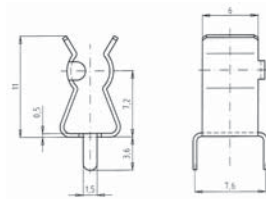
199 073



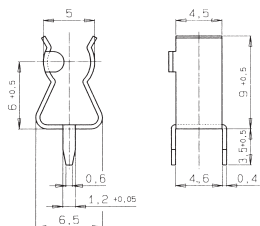
199 207



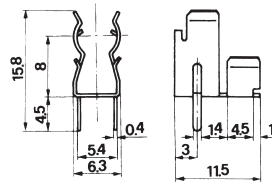
199 429



199 487



199 488



Push-On caps

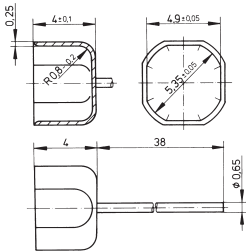
Contact Caps Brass, Silver-Plated, Wire-Ends Cooper, Tinned

Rated Current

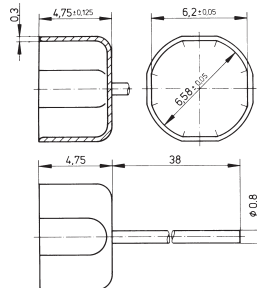
6.3 A

| For Fuse-Links with Contact Cap [mm Ø] | Part No. | Mounting | Connections |
|----------------------------------------|----------|-----------------------|-----------------------------------------------|
| 5 | 204 000 | Printed circuit board | Axially welded wire-ends of 40 mm, solderable |
| 6.3 | 204 100 | Printed circuit board | Axially welded wire-ends of 40 mm, solderable |

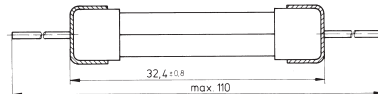
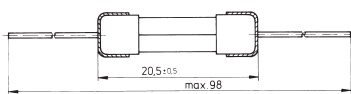
204.000



204.100



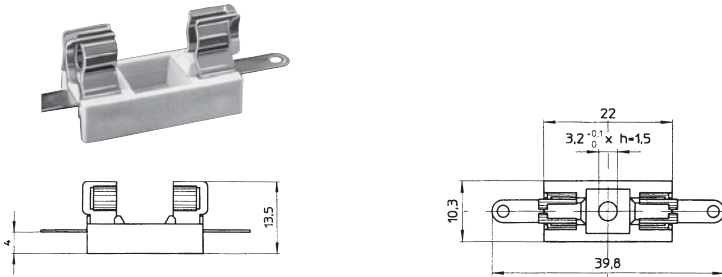
Below we show the assembly of 5 x 20 or 6.3 x 32 mm fuse links with caps. You can order this completely assembled unit by adding the letters "AK" at the end of the article No..



Fuse-Holders For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

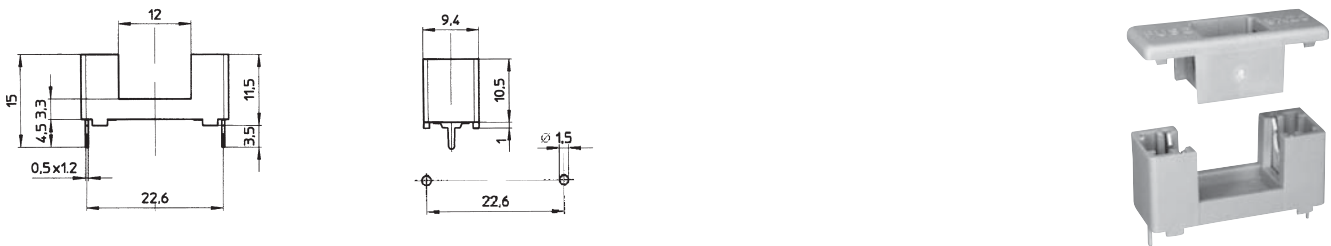
| Rated Voltage [V] | Part No. | Mounting | Connections |
|-------------------|----------|---------------------------------------|----------------|
| 250 | 199 010 | Printed circuit board, screw or rivet | Solder or plug |

199.010

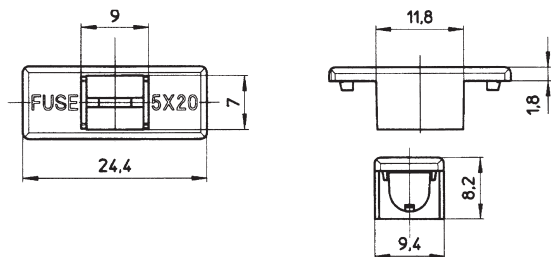


Fuse-Holders For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

| Rated Voltage [V] | Part No. | Mounting | Pin Distance [mm] | Hole Ø [mm] | Connections |
|-------------------|----------|-----------------------|-------------------|-------------|-------------|
| 250 | 199 018 | Printed circuit board | 22.5 | 1.5 | Solder |

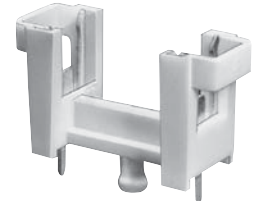
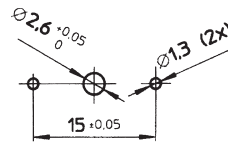
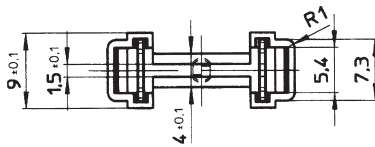
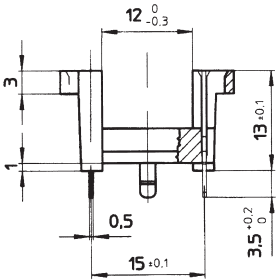


Cover 199 019 For Fuse-Holder 199.018



Fuse-Holders For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

| Rated Voltage [V] | Part No. | Mounting | Pin Distance [mm] | Hole Ø [mm] | Connections |
|-------------------|----------|-----------------------|-------------------|-------------|----------------|
| 250 | 199 060 | Printed circuit board | 15 | 1.3 / 2.6 | Solder or plug |

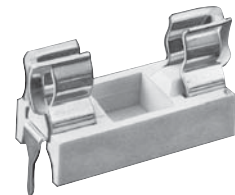
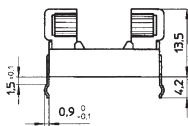
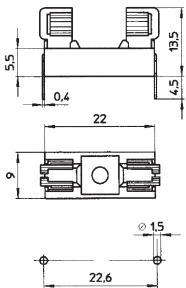


Fuse-Holders For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

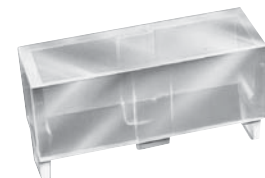
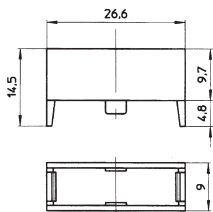
| Rated Voltage [V] | Part No. | Mounting | Pin Distance [mm] | Hole Ø [mm] | Connections |
|-------------------|-----------|-----------------------|-------------------|-------------|-------------|
| 250 | 199 015 | Printed circuit board | 22.5 | 1.5 | Solder |
| 250 | 199 015 A | Printed circuit board | 22.5 | 1.5 | Solder |

199.015

199.015 A

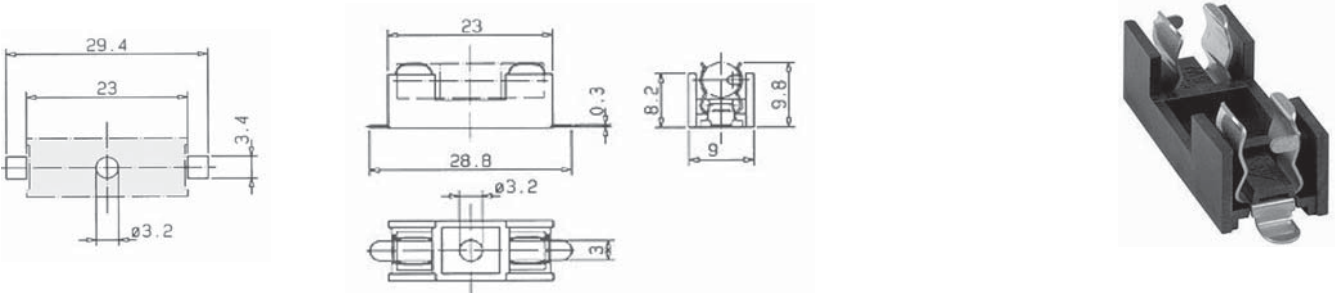


Cover 199 016 For Fuse-Holders 199.015 / 199.015 A



Fuse-Holders SMD For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

| Rated Voltage [V] | Part No. | Mounting |
|-------------------|----------|-----------------------|
| 250 | 199 011 | Printed circuit board |

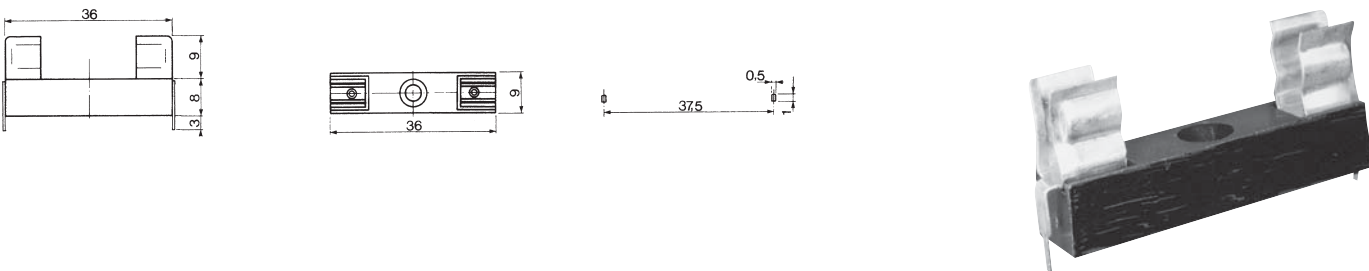


Cover 199 012 For Fuse-Holders 199.011



Fuse-Holder (Fuse-Blocks) For Fuse-Links Size **6.3 x 32 mm** Rated Current **10 A**

| Rated Voltage [V] | Part No. | Mounting | Pin Distance [mm] | Hole Ø [mm] |
|-------------------|----------|-----------------------|-------------------|-------------|
| 250 | 199 022 | Printed circuit board | 37.5 | 0.5 x 1 |



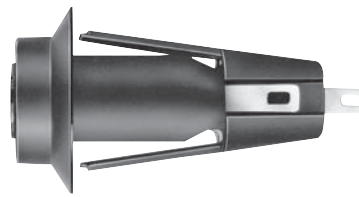
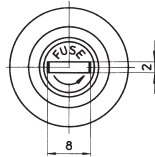
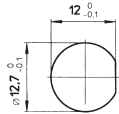
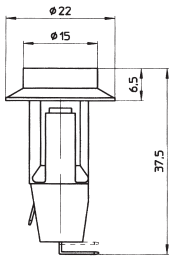
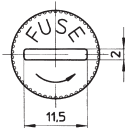
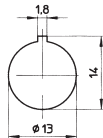
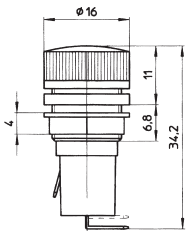
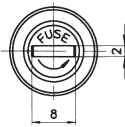
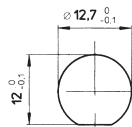
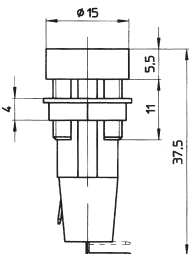
Fuse-Holders (Screw Cap)

 For Fuse-Links Size
5 x 20 mm

 Rated Current
6.3 A

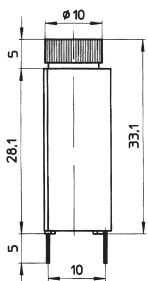
 Protection Class
IP 40

| Rated Voltage [V] | Part No. | Mounting | Hole Ø [mm] | Connections |
|-------------------|----------|------------------------------------------|-------------|----------------|
| 250 | 199 040 | Panel, with flat as shown, snap-in | 12.7 | Solder or plug |
| 250 | 199 030 | Panel, locating lug, locknut SW 14 | 13 | Solder or plug |
| 250 | 199 035 | Panel, with flat as shown, locknut SW 14 | 12.7 | Solder or plug |

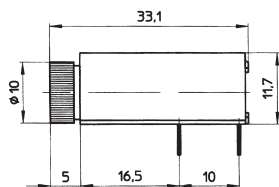
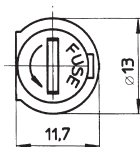
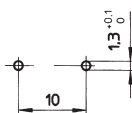
199 040

199 030

199 035


Fuse-Holders (Bayonet Cap) For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A** Protection Class **IP 40**

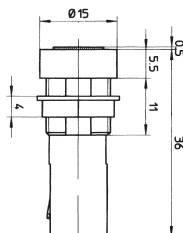
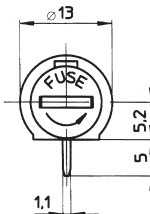
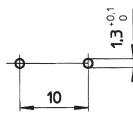
| Rated Voltage [V] | Part No. | Mounting | Pin Distance [mm] | Hole Ø [mm] | Connections |
|-------------------|----------|--------------------------------------------|-------------------|-------------|----------------|
| 250 | 199 045 | Printed circuit board, vertical mounting | 10 | 1.3 + 0.1 | Solder |
| 250 | 199 050 | Printed circuit board, horizontal mounting | 10 | 1.3 + 0.1 | Solder |
| 250 | 199 055 | Panel, with flat as shown, locknut SW 14 | | 12.7 | Solder or plug |
| 250 | 199 070 | Panel, with flat as shown, locknut SW 14 | | 12.7 | Solder or plug |
| 250 | 199 090 | Panel, with flat as shown, locknut SW 16 | | 12.7 | Solder or plug |



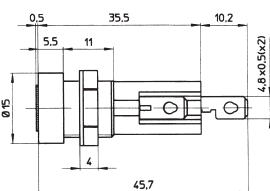
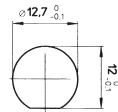
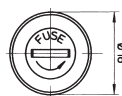
199 045



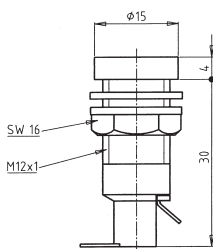
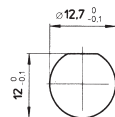
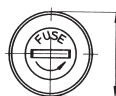
199 050



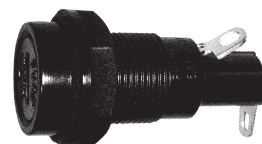
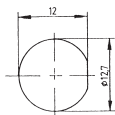
199 055



199 070

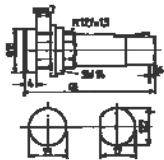


199 090



For Fuse-Links Size Rated Current
Fuse-Holder with Contact Protection **5 x 20 mm + 6.3 x 32 mm** **10/20 A**

| Rated Voltage [V] | Part No. | Mounting | Hole Ø [mm] | Connections |
|-------------------|-----------|----------|-------------|-------------|
| 250 | 71 001 24 | Panel | 1.3 | Solderable |
| 250 | 72 001 08 | | | |
| 250 | 72 001 09 | | | |



72.001.08 (5 x 20 mm)

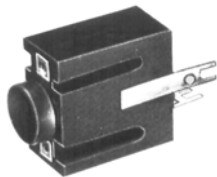
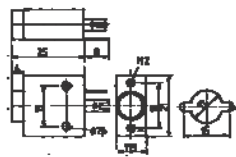


72.001.09 (6.3 x 32 mm)



For Fuse-Links Size Rated Current
Fuse-Holder without Contact Protection **5 x 20 mm & 25 mm** **6.3 A**

| Rated Voltage [V] | Part No. | Mounting | Hole Ø [mm] | Connections |
|-------------------|-----------|----------|-------------|-------------|
| 250 | 71 001 10 | Panel | 11 | Solderable |
| 250 | 72 001 05 | | | |
| 250 | 72 001 06 | | | |



72 001 05 (5 x 20 mm)



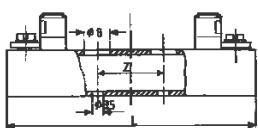
72 001 06 (5 x 25 mm)



with glass window

For Fuse-Links Size
Fuse-Holder Open Type **8 x 75, 110, 145, & 175mm**

| Rated Voltage [kV] | Part No. | Mounting | Connections |
|--------------------|-----------|-------------------------------------------|-------------|
| 1.2 | 71 034 01 | Printed circuit board or insulating plate | Screw |
| 3 | 71 037 01 | Printed circuit board or insulating plate | Screw |
| 6 | 72 040 01 | Printed circuit board or insulating plate | Screw |
| 10 | 72 043 01 | Printed circuit board or insulating plate | Screw |



- 7103401** (1,2 kV) for fuse L = 75 mm Z = 20 mm 8 x 50
- 7103701** (3 kV) L = 110 mm Z = 20 mm 8 x 85
- 7104001** (6 kV) L = 145 mm Z = 80 mm 8 x 120
- 7104301** (10 kV) L = 175 mm Z = 100 mm 8 x 150

Fuse-Holder Closed Type

 For Fuse-Links Size
10 x 85 mm

 Rated Current
6.3 A

| Rated Voltage [V] | Part No. | Mounting | Hole Ø [mm] | Connections |
|-------------------|-----------|----------|-------------|-------------|
| 3000 | 71 037 02 | Panel | 22.5 | Solderable |

