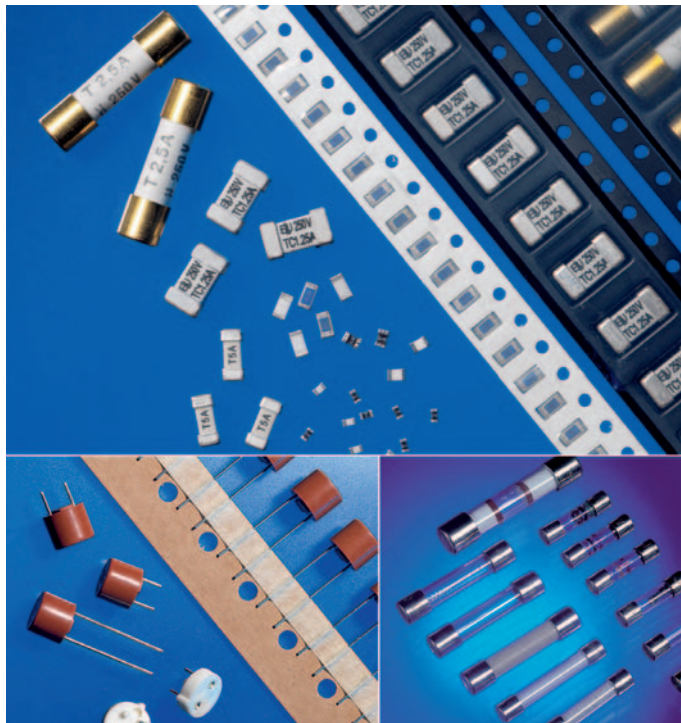


# Miniature Fuses



## 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

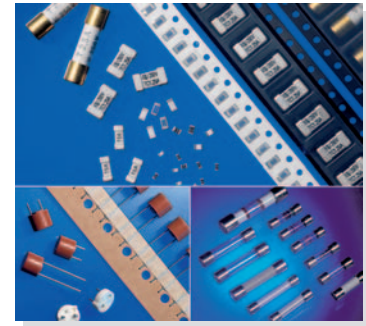
Standards: IEC 60127  
DIN VDE 0820  
CEE4  
UL 248-14  
UL 512  
CSA-C22.2 No. 248.14

Approvals:



## Features / Benefits

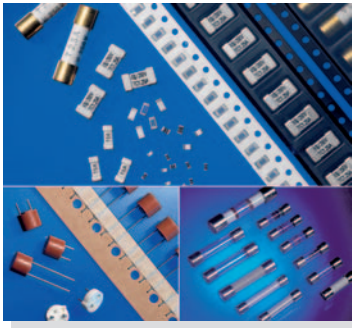
- ▷ Very high interrupting rating up to 70 kA
- ▷ High rated voltages up to 10 kV
- ▷ High fuse ratings available for semiconductor protection
- ▷ Fuse-bases, clips and accessories are available



## 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
Ø 5	500	6.3	199 073	G 59	◇
Ø 5	500	6.3	199 207	G 59	◇
Ø 5	500	6.3	199 429	G 59	◇
Ø 6.3	500	6.3	199 487	G 59	◇
Ø 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
Ø 5	6.3	204 000	G 60	◇
Ø 6.3	6.3	204 100	G 60	◇
Example of fuselink including Push-on caps		(XXX XXX) AK	G 60	◇



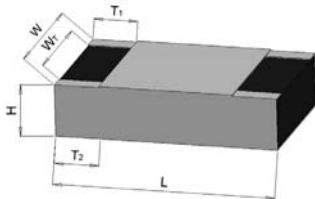
## SMD Fuses

# FF

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

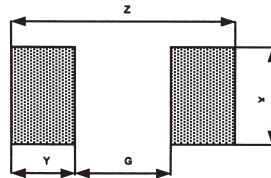
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Cold Resistance [mΩ]	cURus	Weight [kg/100]	Pack
0.500	151 000.0.500			50			0.01	1 000
0.630	151 000.0.630			50			0.01	1 000
0.750	151 000.0.750			50			0.01	1 000
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 <sub>T</sub>	> 75 % of W
T <sub>1</sub>	0,2 +0,1/-0,15 mm
T <sub>2</sub>	0,2 ±0,1 mm

### Recommended pad layout



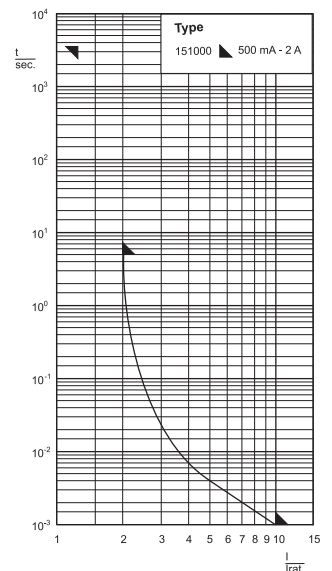
### Reflow soldering

G	0,25 mm
Y	0,6 mm
X	0,55 mm
Z	1,45 mm

### Pre-Arcing Time Limits

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

151.000





**SMD Fuses**

**FF**

Size  
**0603**

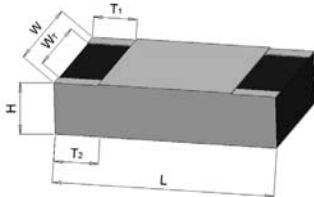
Rated Voltage  
**32 V**

**Very Quick Acting**

Standard  
**UL 248-14 · IEC 60127-4**

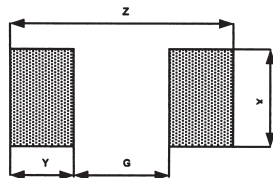
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Cold Resistance [mΩ]	UL rec. VDE	Marking	Weight [kg/100]	Pack
0.500	152 000.0.500	415	0.0009	50	640	✓ ✓	F	0.01	1000
0.630	152 000.0.630	334	0.0014	50	400	✓	CT	0.01	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



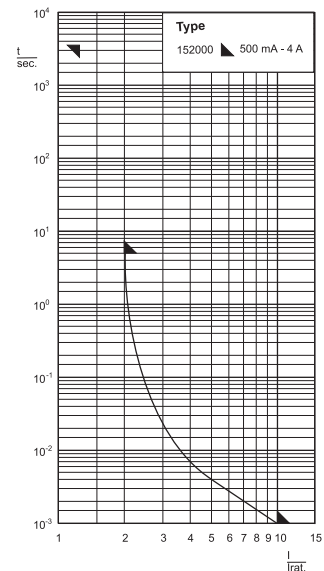
- H 0,45 +0,1/-0,05 mm
- L 1,55 ±0,05 mm
- W 0,85 ±0,1 mm
- W<sub>T</sub> > 75 % of W
- T<sub>1</sub> 0,3 +0,15/-0,2 mm
- T<sub>2</sub> 0,3 +0,15/-0,2 mm

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 <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
500 mA ▼ 4 A	> 1 h	< 5 s	-	-	< 1 ms

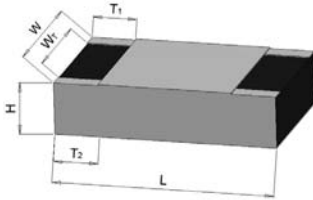


**SMD Fuses** **FF**

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

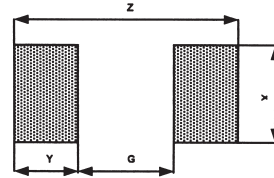
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Cold Resistance [mΩ]	UL rec.	Marking	Weight [kg/100]	Pack
0.500	153 000.0.500	430	0.0009	50	660	✓	F	0.01	1 000
0.630	153 000.0.630	350	0.0014	50	420	✓	CT	0.01	1 000
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<sub>T</sub> > 75 % of W
- T<sub>1</sub> 0,4 +0,1/-0,2 mm
- T<sub>2</sub> 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

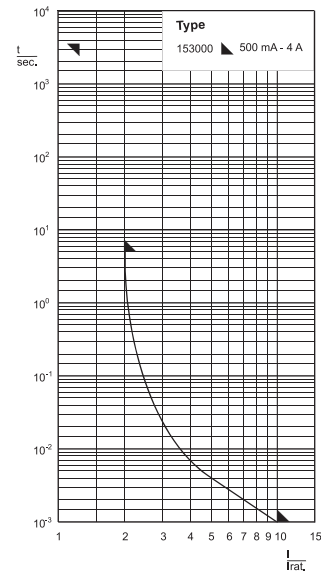
**Wave soldering**

- 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 <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
500 mA ▼ 4 A	> 1 h	< 5 s	-	-	< 1 ms

**153.000**





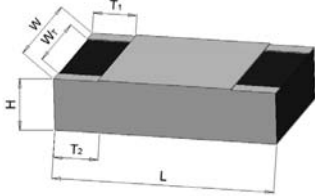
**SMD Fuses**

**FF**

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

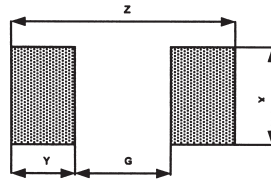
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Cold Resistance [mΩ]	UL rec. VDE	Marking	Weight [kg/100]	Pack
0.250	154 000.0.250	310	0.0001	50/100	880	listed		0.01	1 000
0.375	154 000.0.375	260	0.0004	50/100	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<sub>T</sub> > 75 % of W
- T<sub>1</sub> 0,5 ±0,25 mm
- T<sub>2</sub> 0,5 ±0,25 mm

Recommended pad layout



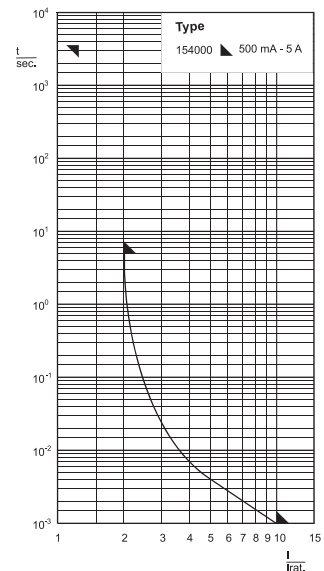
Reflow soldering

- 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 <sub>n</sub>	1.25 I <sub>n</sub>	2.0 I <sub>n</sub>	3 I <sub>n</sub>	10 I <sub>n</sub>
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**      Rated Voltage **125 V**      **Fast Acting**      **UL 248-14 · CSA C22.2 No. 248.14**      Standard

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> 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**      Rated Voltage **65 V**      **Fast Acting**      **UL 248-14 · CSA C22.2 No. 248.14**      Standard

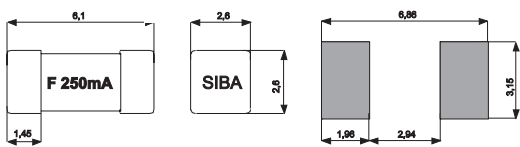
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Cold Resistance [mΩ]	cURus	Weight [kg/100]	Pack
10	157 000.10	90	27	50	5.9	✓	0.015	100
12	157 000.12	90	45	50	4.9	✓	0.015	100
15	157 000.15	90	81	50	3.8	✓	0.015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

1000 pcs. on tape Part No. 157 000 .... GT



**SMD Fuses**

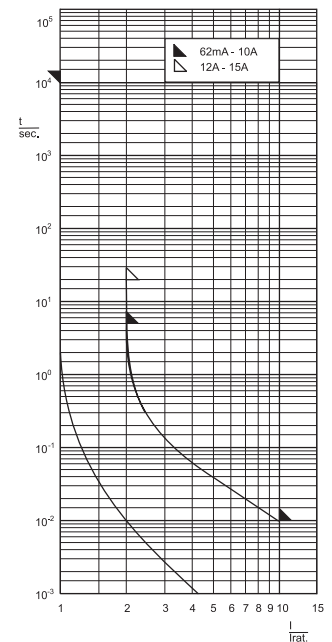
**F**



**Pre-Arcing Time Limits**

Rated Current	1.0 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
62 mA	> 4 h	< 5 s	-	-	< 10 ms
10 A					
12 A		< 20 s	-	-	< 10 ms
15 A					

157.000





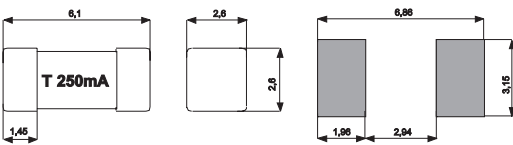
# SMD Fuses

T

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

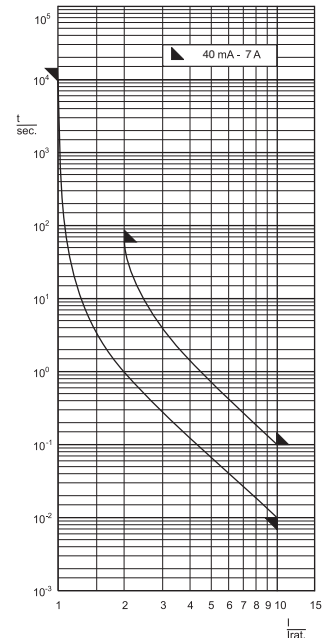
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Cold Resistance [mΩ]	cURus	Weight [kg/100]	Pack
0.250	158 000.0.250	280	0.08	50	900	✓	0.015	100
0.315	158 000.0.315	260	0.16	50	700	✓	0.015	100
0.375	158 000.0.375	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 <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
250 mA ▼ 7 A	> 4 h	< 60 s	-	-	10 ms ▼ 100 ms





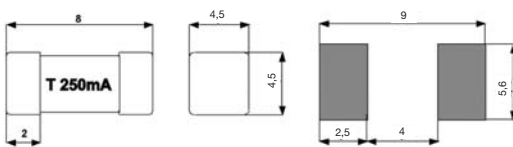
**SMD Fuses**

**T**

**SMD**      **Rated Voltage 250 V**      **Time Lag**      **DIN VDE 0820-3/4 · IEC 60127-3/4**      **Standard**

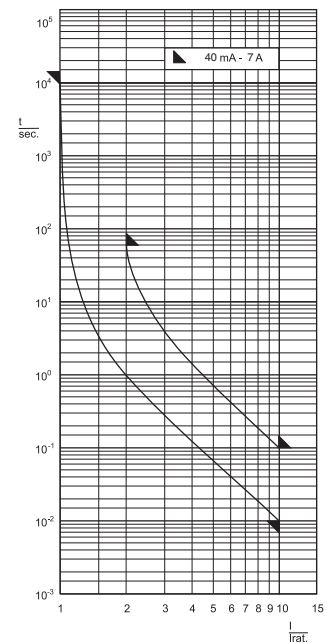
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> ts-value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	cURus	Weight [kg/100]	Pack
0.040	160 000.0.040	860	0.015	50	✓	0.2	100
0.050	160 000.0.050	660	0.017	50	✓	0.2	100
0.063	160 000.0.063	580	0.02	50	✓	0.2	100
0.080	160 000.0.080	480	0.035	50	✓	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



**Pre-Arcing Time Limits**

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

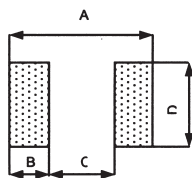
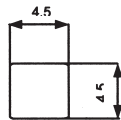
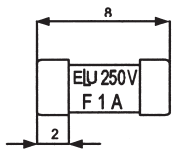




**SMD Fuses** **F**

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

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> 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

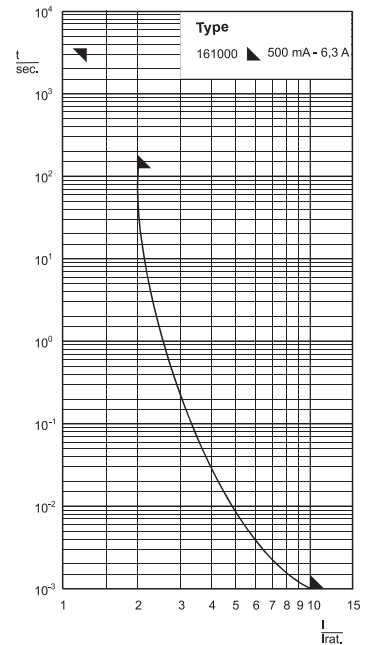


Recommended pad layout

	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 <sub>n</sub>	2 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
500 mA	> 1 h	< 120 s	-	-	1 ms
6.3 A	-	-	-	-	10 ms





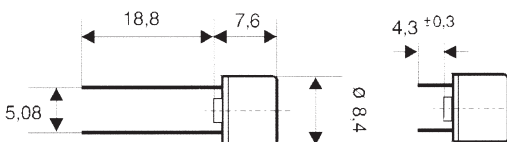
**SUB Miniature Fuses**

**F**

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

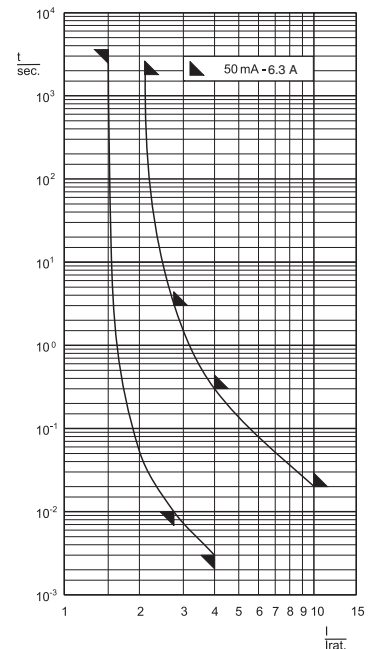
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [mW]	SEMKO	Weight [kg/100]	Pack
0.050	164 000.0.050	820	0.0003	35	95	✓	0.1	100
0.063	164 0000.063	750	0.0007	35	110	✓	0.1	100
0.080	164 000.0.80	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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	> 1 h	< 30 min.	10 ms	3 ms	< 20 ms
6.3 A			3 s	300 ms	





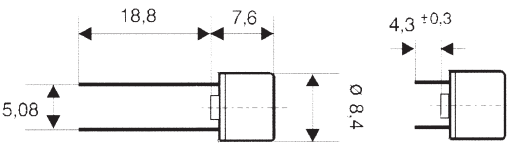
**SUB Miniature Fuses**

**M**

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

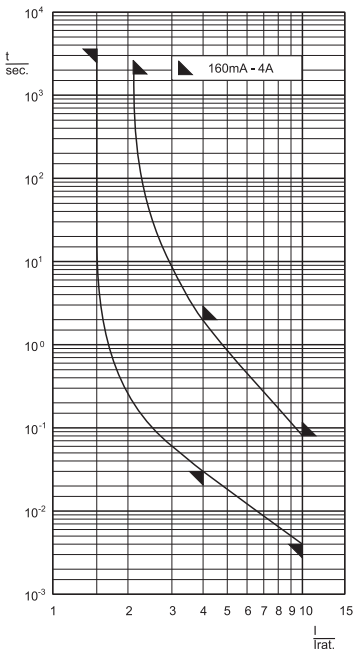
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [mW]	Weight [kg/100]	Pack
0.160	165 000.0.160	325	0.075	35	140	0.1	100
0.200	165 000.0.200	120	0.020	35	80	0.1	100
0.250	165 000.0.250	120	0.036	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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
160 mA	> 1 h	< 30 min.	-	30 ms	4 ms
4 A				2 s	80 ms





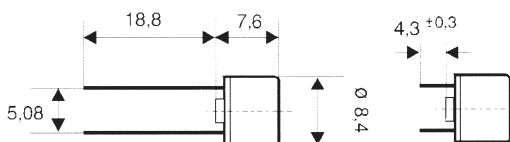
**SUB Miniature Fuses**

**T**

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

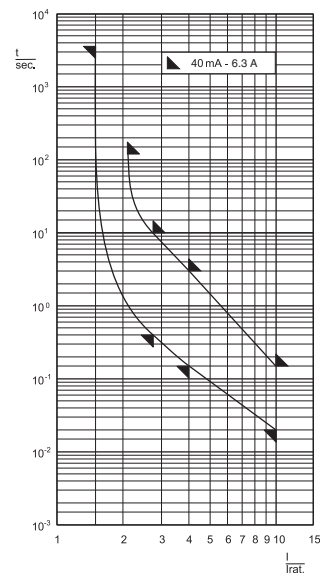
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [mW]	SEMKO VDE cURus	Weight [kg/100]	Pack
0.040	166 000.0.040	530	0.015	35	60	✓✓✓	0.1	100
0.050	166 000.0.050	490	0.017	35	70	✓✓✓	0.1	100
0.063	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

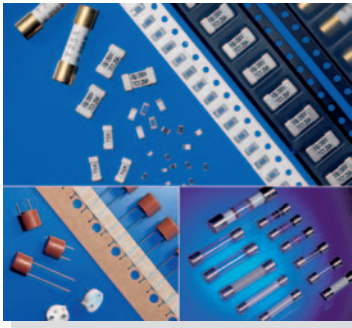


**Pre-Arcing Time Limits**

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







# SUB Miniature Fuses

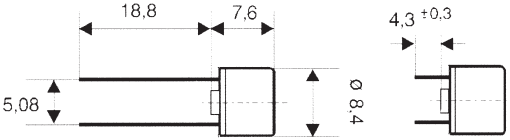
F

KS
Rated Voltage
Fast Acting
Standard

250 V
UL 248-14 · CSA C22.2 No. 248.14

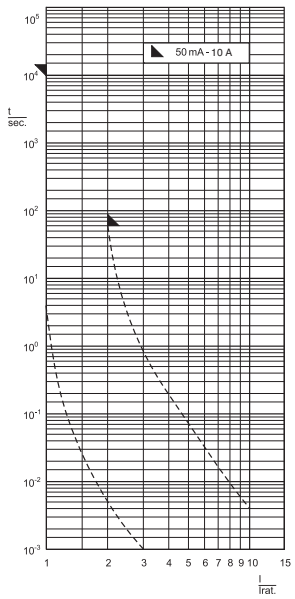
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [mW]	UL	CSA	Weight [kg/100]	Pack
0.050	164 500.0.050	1 500	0.0002	50	75	✓	✓	0.1	100
0.063	164 5000.063	1 350	0.0003	50	85	✓	✓	0.1	100
0.080	164 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

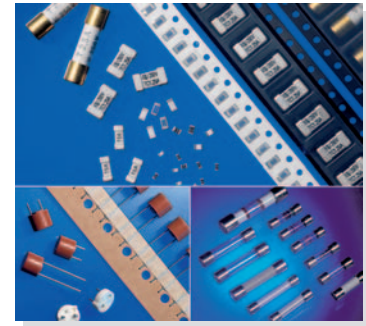
short pins (4.3 mm) Part No. 164 550  
 1000 pcs. on tape Part No. 164 500 .... GT



**Pre-Arcing Time Limits**

Rated Current	1.0 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA ▼ 10 A	> 4 h	< 60 s	-	-	-





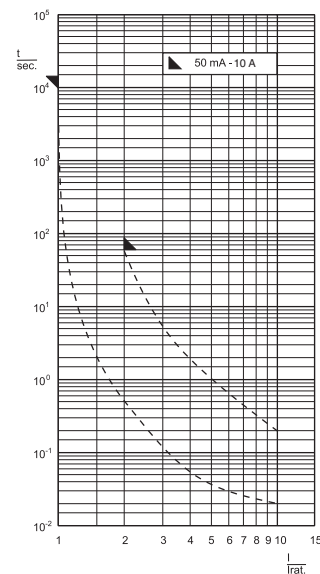
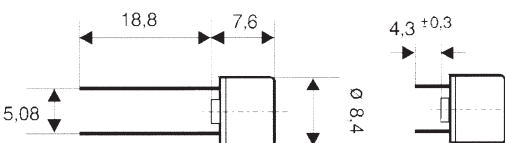
**SUB Miniature Fuses**

**T**

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

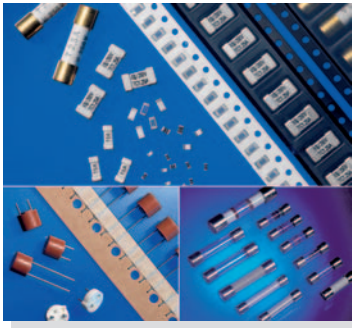
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [mW]	⊖	⊕	Weight [kg/100]	Pack
0.050	166 500.0.050	800	0.015	50	50	✓	✓	0.1	100
0.063	166 500.0.063	700	0.017	50	50	✓	✓	0.1	100
0.080	166 500.0.080	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 <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	> 4 h	< 60 s	-	-	-
10 A					

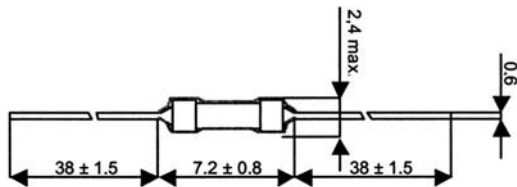


**SUB Miniature Fuses**

**F**

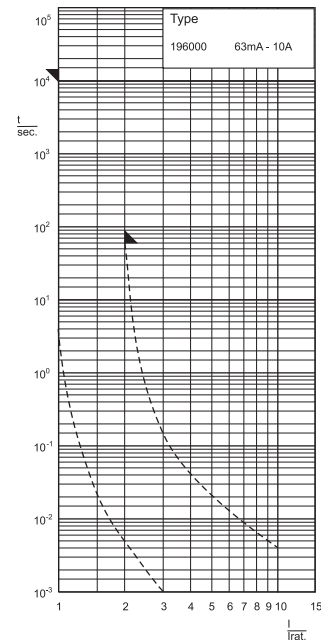
Size **2.3 x 8 mm**      Rated Voltage **125 V**      Flink Acting      Standard **UL 248-14**

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Cold Resistance [mΩ]	UL	UL	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 <sub>n</sub>	135% I <sub>n</sub>	150% I <sub>n</sub>	200% I <sub>n</sub>
63 mA ▼ 10 A	< 4 h	-	-	5 s





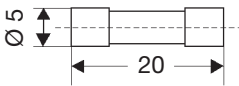
**Miniature Fuses**  
Glass Tube

**F**

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

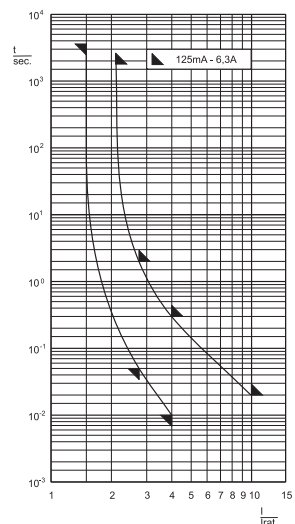
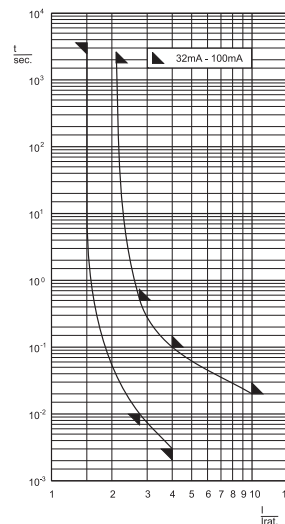
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	SEMKO VDE	BEAB cURus	Weight [kg/100]	Pack
0.032	179 020.0.032	10 000	0.0001	35	0.8	✓	✓	0.1	100
0.040	179 020.0.040	8 000	0.0002	35	0.8	✓	✓	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

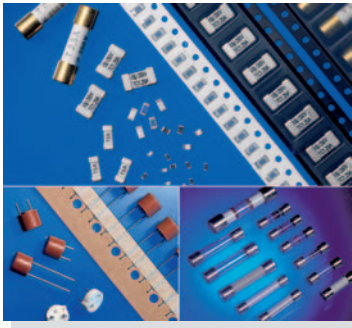
(...) = not standardized



**Pre-Arcing Time Limits**

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





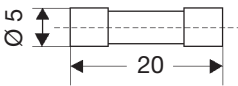
**Miniature Fuses**  
Ceramic Tube

F

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

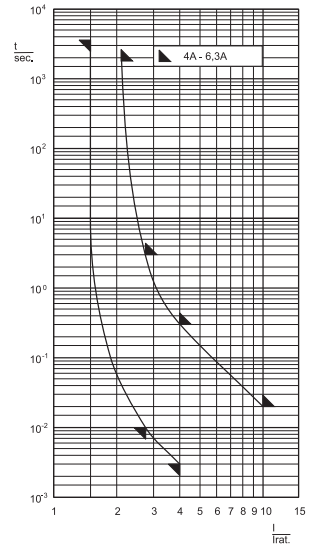
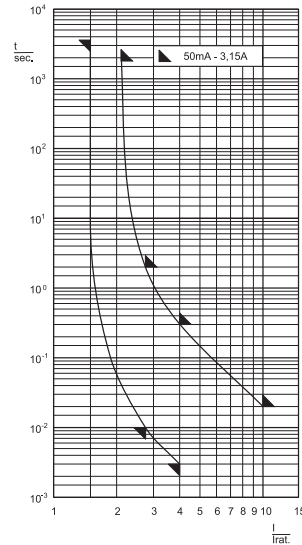
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> ts-value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	SEMIKO	Weight [kg/100]	Pack
0.050	179 021.0.050	4 000	0.00022	1 500	0.5		0.13	100
0.063	179 021.0.63	3 900	0.00037	1 500	0.6		0.13	100
0.080	179 021.0.80	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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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		
			300 ms		




**Miniature Fuses**  
 Glass Tube with Filling

F

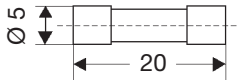
 Size  
**5 x 20 mm**

 Rated Voltage  
**250 V**
**Fast Acting**

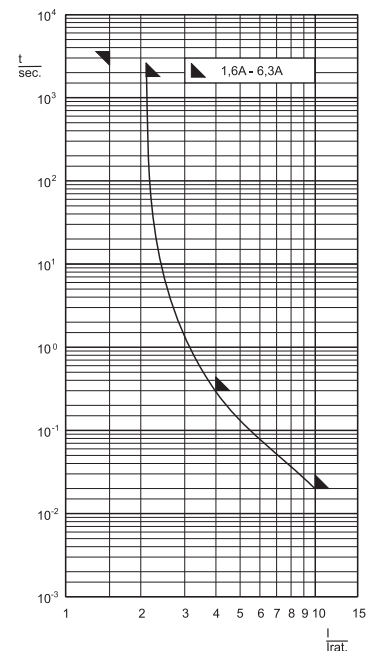
 Standard  
**DIN 41571 Part 1**

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> 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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
1.6 A ▼ 6.3 A	> 1 h	< 30 min.	-	< 300 ms	< 20 ms



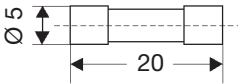


**Miniature Fuses**  
Glass Tube > 1.25 A with Filling **M**

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

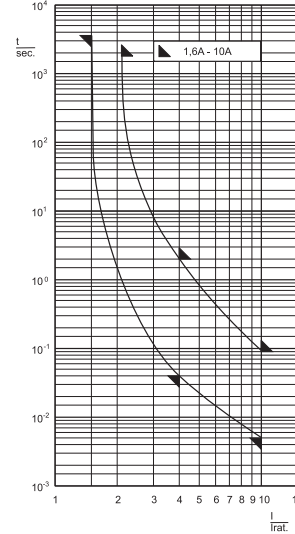
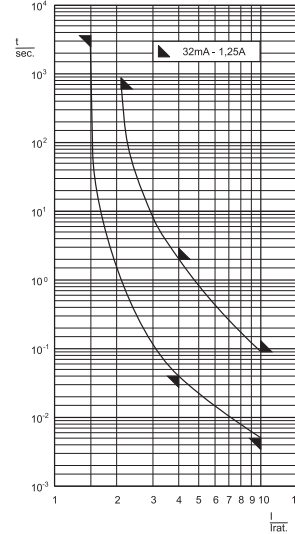
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	Weight [kg/100]	Pack
0.032	172 000.0.032	640	0.0055	80	0.1	0.1	100
0.040	172 000.0.40	630	0.008	80	0.1	0.1	100
0.050	172 000.0.050	600	0.017	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 <sup>1</sup>	172 100.8	140	230	300	2.0	0.12	100
10 <sup>1</sup>	172 100.10	120	370	300	2.5	0.12	100

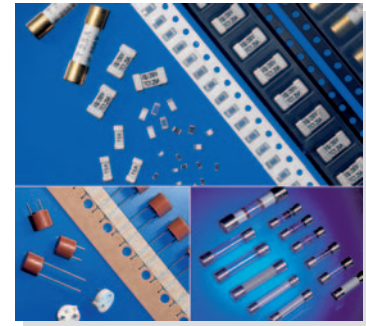
<sup>1</sup> Consideration should be given to heat dissipation.



**Pre-Arcing Time Limits**

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





**Miniature Fuses**  
Ceramic Tube

**M**

Size  
**5 x 20 mm**

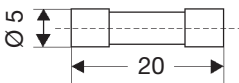
Rated Voltage  
**250 V**

**Medium Time Lag**

Standard  
**Not Standardized**

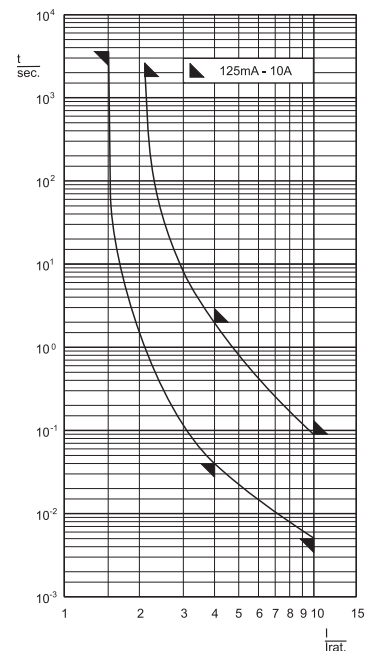
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	Weight [kg/100]	Pack
0.125	172 200.0.125	2 500	0.011	1 500	0.1	0.14	100
0.160	172 200.0.160	2 000	0.036	1 500	0.1	0.14	100
0.200	172 200.0.200	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 <sup>1</sup>	172 200.8	140	230	1 500	2.0	0.14	100
10 <sup>1</sup>	172 200.10	120	370	1 500	2.5	0.14	100

<sup>1</sup> Consideration should be given to heat dissipation.

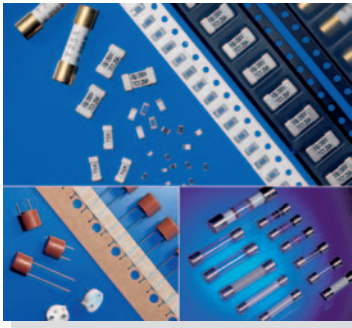


**Pre-Arcing Time Limits**

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







## Miniature Fuses

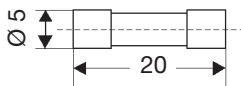
### Glass Tube

T

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

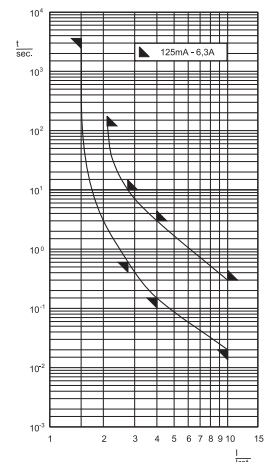
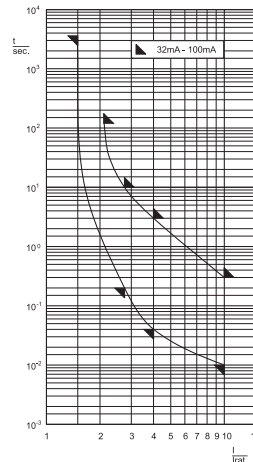
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	SEMKO	VDE	cURus	Weight [kg/100]	Pack
0.032	179 120.0.032	3 000	0.010	35	0.2	✓	✓	✓	0.1	100
0.040	179 120.0.040	2 000	0.020	35	0.2	✓	✓	✓	0.1	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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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

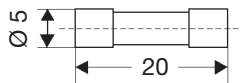
 Size  
**5 x 20 mm**

 Rated Voltage  
**250 V**
**Time Lag**

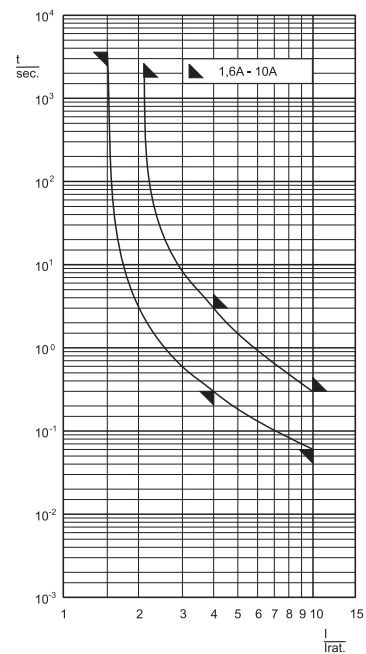
 Standard  
**DIN 47571 Part 3**

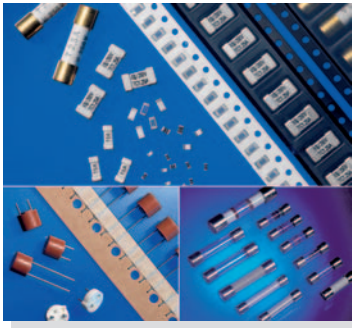
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	Weight [kg/100]	Pack
1.6	173 100.1.6	200 <sup>2</sup>	16	300	0.8	0.13	100
2	173 100.2	190 <sup>2</sup>	26	300	0.9	0.13	100
2.5	173 100.2.5	180 <sup>2</sup>	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 <sup>1</sup>	173 100.8	120	390	300	1.6	0.13	100
10 <sup>1</sup>	173 100.10	115	620	300	1.9	0.13	100
12.5 <sup>1</sup>	173 100.12.5	100	1 150	300	2.8	0.13	100
15 <sup>1</sup>	173 100.15	80	1 800	300	3.3	0.13	100
16 <sup>1</sup>	173 100.16	80	1 800	300	3.8	0.13	100

<sup>1</sup> Consideration should be given to heat dissipation.

<sup>2</sup> max according to EN 60127-2/5.

**Pre-Arcing Time Limits**

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





## Miniature Fuses

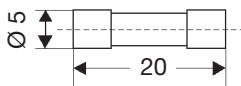
### Ceramic Tube

T

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

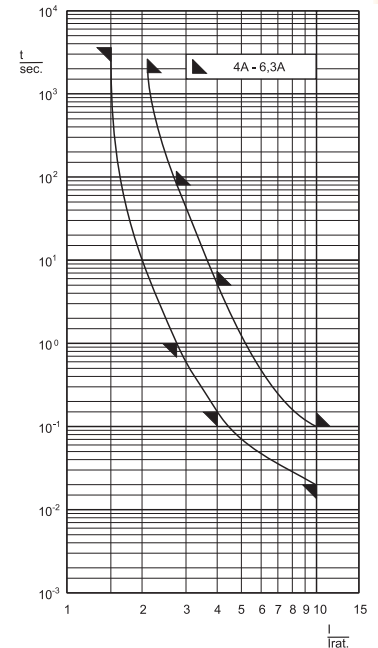
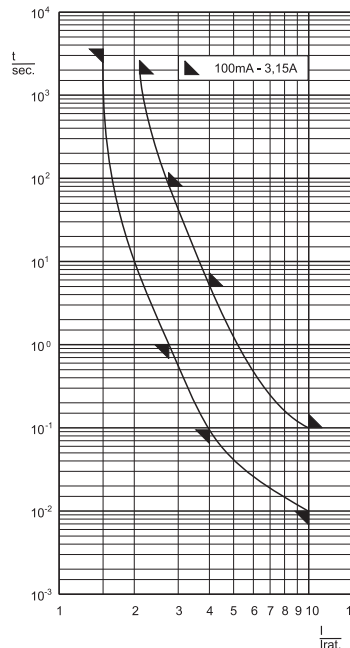
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	SEMKO VDE cURus UR BSI	Weight [kg/100]	Pack
0.100	179 200.0.100	2 300	0.020	1 500	0.6		0.13	100
0.125	179 200.0.125	2 200	0.045	1 500	0.8		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 <sup>1</sup>	179 200.8	90	230	1 500	2.0		0.13	100
10 <sup>1</sup>	179 200.10	90	370	1 500	2.5		0.13	100
12.5 <sup>1</sup>	179 200.12.5	70	670	1 500	3.1		0.13	100
16 <sup>1</sup>	179 200.16	70	1500	1 500	3.9		0.13	100

<sup>1</sup> Consideration should be given to heat dissipation.



### Pre-Arcing Time Limits

Rated Current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
100 mA	> 1 h	< 30 min.	1 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
				80 s	





**Miniature Fuses**  
Glass Tube

T

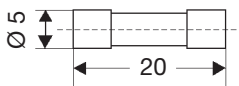
Size  
**5 x 20 mm**

Rated Voltage  
**250 V**

Time Lag

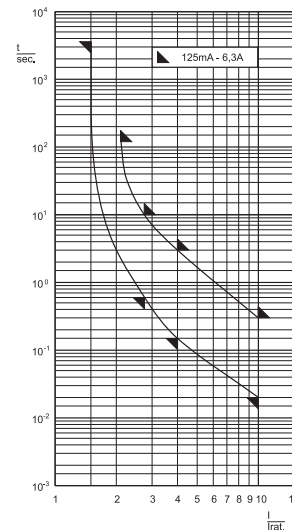
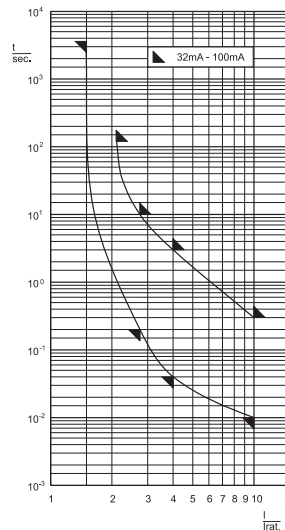
Standard  
**DIN VDE 0820-2/6 · IEC 60127-2/6**

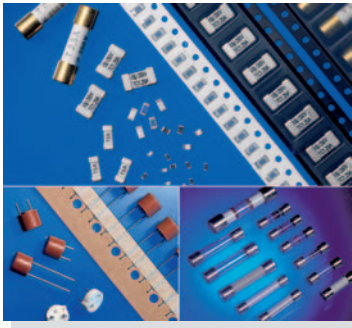
Rated Current [A]	Part No.	Voltage drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	SEMLO VDE	Weight [kg/100]	Pack
0.032	179 150.0.032	3 000	0.010	150	0.2		0.1	100
0.040	179 150.0.040	2 000	0.020	150	0.2		0.1	100
0.050	179 150.0.050	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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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



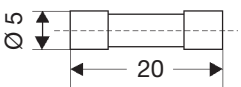


**Miniature Fuses**  
Glass Tube **T**

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

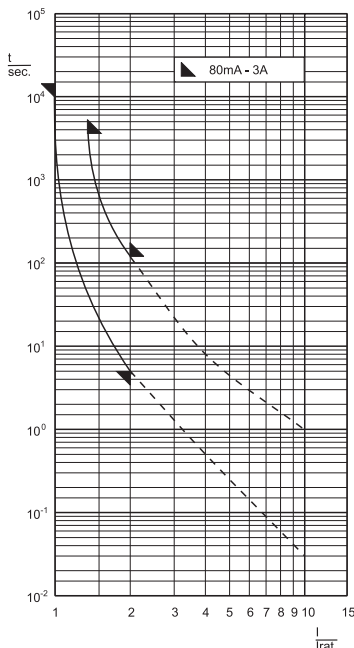
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	UL	Weight [kg/100]	Pack
0.080	179 500.0.080	2 800	0.024	35 <sup>1</sup>	0.3	✓✓	0.1	100
0.100	179 500.0.100	2 400	0.053	35 <sup>1</sup>	0.3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

<sup>1</sup> 10.000 A @ 125 V AC



**Pre-Arcing Time Limits**

Rated Current	1.0 I <sub>n</sub>	1.35 I <sub>n</sub>	2 I <sub>n</sub>
80 mA	4 h	1 h	5 s
3 A			120 s




**Miniature Fuses**  
 Ceramic Tube

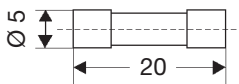
**FF**

 Size  
**5 x 20 mm**

 Rated Voltage  
**250 V**
**Very Fast Acting**

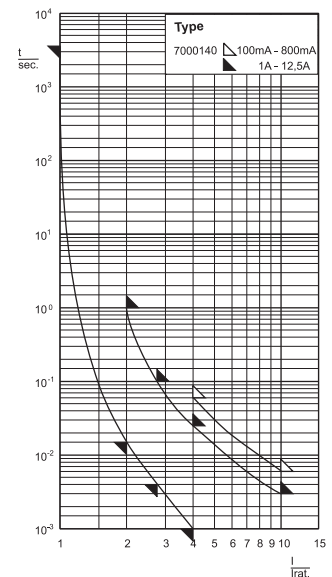
 Standard  
**Not Standardized**

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> 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 <sub>rat</sub>	2.0 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
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**

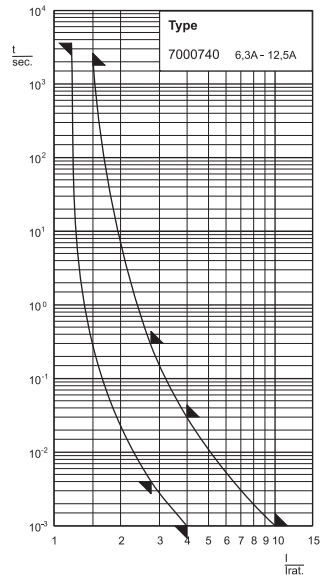
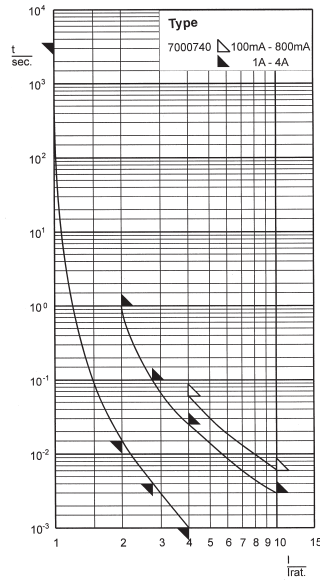
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [kA]	Power Dissipation [W]	$\frac{I}{I_{rat}}$	Weight [kg/100]	Pack
0.100	70 007 40.0.100	4 000	0.0016	10	0.4		0.14	100
0.125	70 007 40.0.125	3 500	0.0024	10	0.5		0.14	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 <sub>rat</sub>	2.0 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
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 <sub>rat</sub>	1.5 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
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**

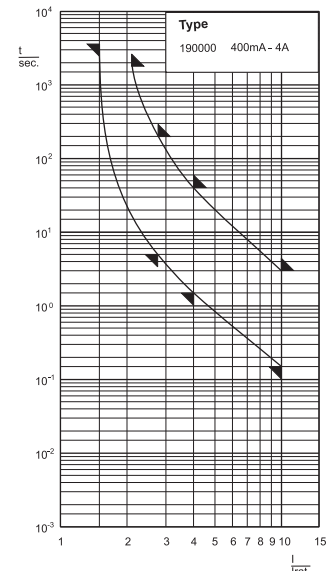
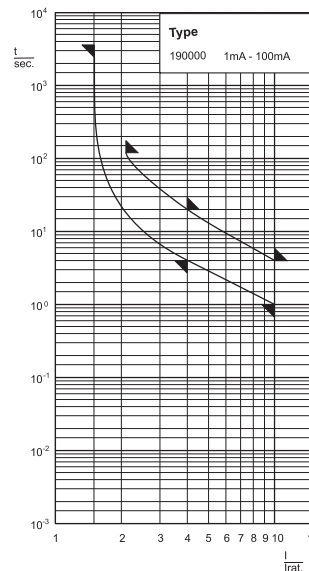
Standard  
**Special Type**

Rated Current [A]	Part No.	Voltage Drop [V]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	eUL	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

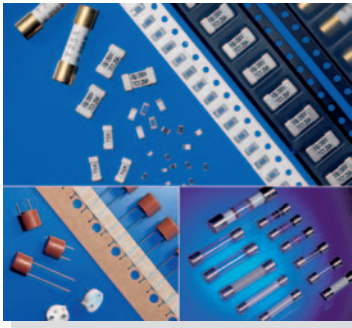
\* on request

**Pre-Arcing Time Limits**

Rated Current	1.5 I <sub>rat</sub>	2.1 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
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

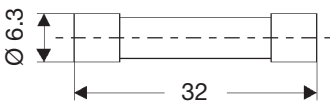
Glass Tube

F

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

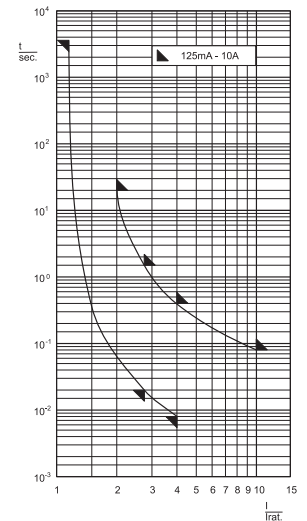
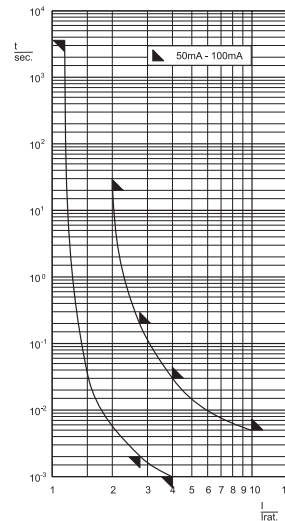
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	Weight [kg/100]	Pack
0.050	189 000.0.050	9 600	0.0003	35	0.7	0.1	100
0.063	189 000.0.063	6 000	0.0005	35	0.5	0.1	100
0.080	189 000.0.080	5 000	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 <sup>1</sup>	189 000.8	160	240	80	2.0	0.1	100
10 <sup>1</sup>	189 000.10	150	500	100	2.3	0.1	100
12.5 <sup>1</sup>	189 000.12.5	140	650	125	2.5	0.1	100
16 <sup>1</sup>	189 000.16	130	1 250	160	2.8	0.1	100
20 <sup>1</sup>	189 000.20	130	1 600	200	4.0	0.1	100

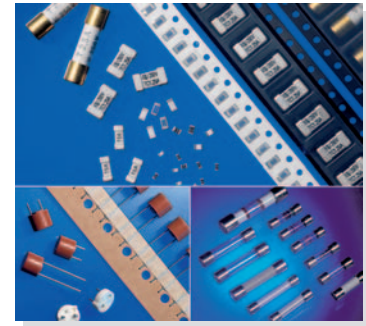
<sup>1</sup> Consideration should be given to heat dissipation.



### Pre-Arcing Time Limits

Rated Current	1.15 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	< 1 h	< 20 s	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 <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [kA]	Power Dissipation [W]	ULrec.	Weight [kg/100]	Pack
0.160	189 020.0.160	7 000	0.0015	150 *	2.5	✓	0.24	100
0.200	189 020.0.200	6 500	0.0035	150 *	2.9	✓	0.24	100
0.250	189 020.0.250	6 000	0.0085	150 *	3.4	✓	0.24	100
0.315	189 020.0.315	1 000	0.025	150 *	0.9	✓	0.24	100
0.400	189 020.0.400	900	0.045	150 *	1.0	✓	0.24	100
0.500	189 020.0.500	800	0.09	150 *	1.1	✓	0.24	100
0.630	189 020.0.630	700	0.15	150 *	1.3	✓	0.24	100
0.800	189 020.0.800	600	0.3	150 *	1.4	✓	0.24	100
1	189 020.1	400	0.4	50 **	1.2	✓	0.24	100
1.25	189 020.1.25	300	0.8	50 **	1.3	✓	0.24	100
1.6	189 020.1.6	300	1.5	50 **	1.4	✓	0.24	100
2	189 020.2	280	2.5	50 **	1.6	✓	0.24	100
2.5	189 020.2.5	260	5	50 **	1.8	✓	0.24	100
3.15	189 020.3.15	240	9	50 **	2.3	✓	0.24	100
4	189 020.4	220	18	50 **	2.6	✓	0.24	100
5	189 020.5	190	40	50 **	2.9	✓	0.24	100
6.3	189 020.6.3	170	80	50 **	3.2	✓	0.24	100
8 <sup>1</sup>	189 020.8	160	150	150 *	3.7		0.24	100
10 <sup>1</sup>	189 020.10	150	240	150 *	4.0		0.24	100
12.5 <sup>1</sup>	189 020.12.5	140	500	150 *	5.5		0.24	100
16 <sup>1</sup>	189 020.16	130	920	150 *	6.5		0.24	100

Size  
**6.3 x 32 mm**

Rated Voltage  
**440 V**

**Fast Acting**

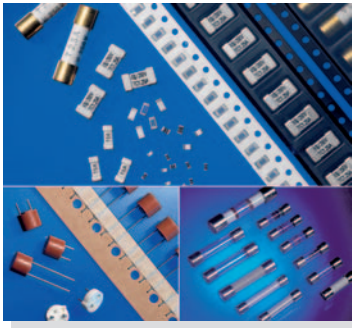
Standard  
**Not Standardized**

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	ULrec.	Weight [kg/100]	Pack
20 <sup>1</sup>	189 020.20	120	1 500	1500	8.4		0.24	100
25 <sup>1</sup>	189 020.25	110	3 100	1500	11		0.24	100

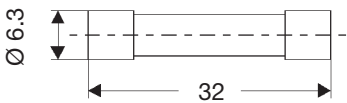
<sup>1</sup> Consideration should be given to heat dissipation.

\* @ 500 V AC

\*\* @ 500 V AC and 20 kA @ 500 V DC approved



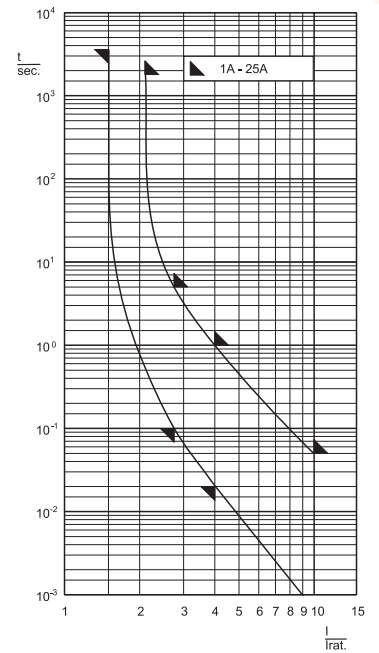
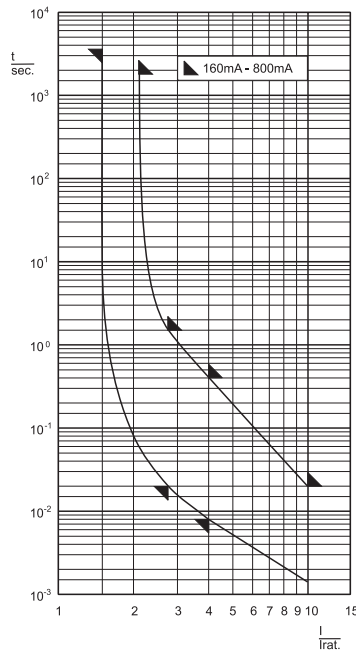
**Miniature Fuses**  
Ceramic Tube **F**

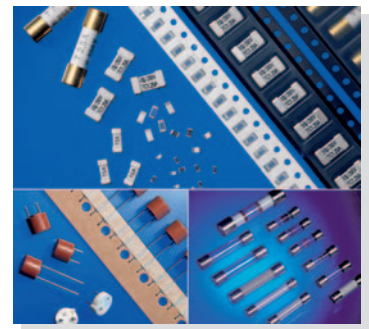


**Pre-Arcing Time Limits**

Rated Current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>	
160 mA	> 1 h	30 min.	20 ms	8 ms	< 20 ms	
800 mA			1.5 s	0.4 s		
1 A			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**

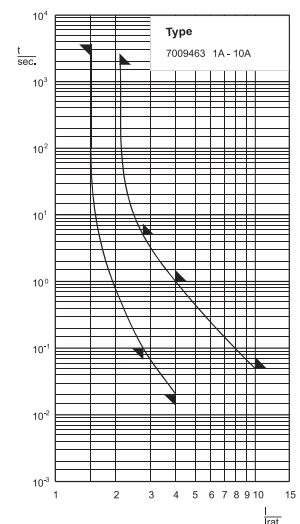
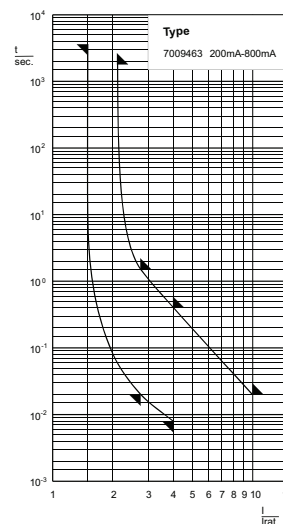
 Rated Voltage  
**600 V**
**Fast Acting**

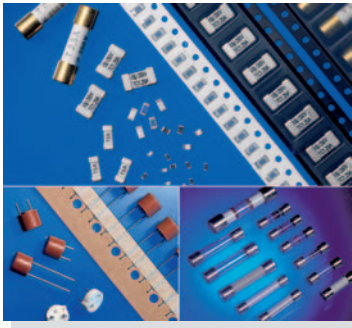
 Standard  
**Special Type**

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> ts-value [A <sup>2</sup> 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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
200 mA	> 1 h	<30 min.	20 ms	8 ms	< 20 ms
800 mA			100 ms	400 ms	
1 A	> 1 h	<30 min.	1.5 s	20 ms	< 50 ms
10 A			5 s	1 s	





## Miniature Fuses

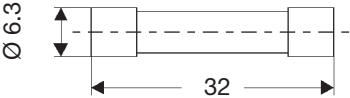
### Ceramic Tube

T

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

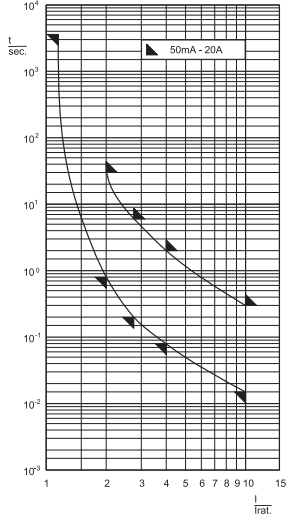
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	Weight [kg/100]	Pack
0.050	189 100.0.050	3 000	0.035	35	0.3	0.12	100
0.063	189 100.0.063	2 500	0.06	35	0.3	0.12	100
0.080	189 100.0.080	2 000	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 <sup>1</sup>	189 100.8	200	370	80	2.0	0.12	100
10 <sup>1</sup>	189 100.10	150	630	100	2.3	0.12	100
12.5 <sup>1</sup>	189 100.12.5	150	820	125	2.8	0.12	100
16 <sup>1</sup>	189 100.16	150	1 200	160	3.0	0.12	100
20 <sup>1</sup>	189 100.20	150	1 600	200	4.0	0.12	100

<sup>1</sup> Consideration should be given to heat dissipation.



#### Pre-Arcing Time Limits

Rated Current	1.15 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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 <sup>2</sup> ts-value [A <sup>2</sup> 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 *	1.3		0.24	100
0.125	189 140.0.125	3 400	0.08	1 500 *	1.4		0.24	100
0.160	189 140.0.160	3 000	0.12	1 500 *	1.5		0.24	100
0.200	189 140.0.200	2 500	0.20	1 500 *	1.6		0.24	100
0.250	189 140.0.250	2 000	0.35	1 500 *	1.7		0.24	100
0.315	189 140.0.315	1 800	0.50	1 500 *	1.8		0.24	100
0.400	189 140.0.400	1 600	0.80	1 500 *	2.0		0.24	100
0.500	189 140.0.500	450	0.32	1 500 *	0.6	✓	0.24	100
0.630	189 140.0.630	400	0.60	1 500 *	0.7	✓	0.24	100
0.800	189 140.0.800	350	1.0	1 500 *	0.8	✓	0.24	100
1	189 140.1	350	1.5	1 500 *	0.9	✓	0.24	100
1.25	189 140.1.25	300	3.1	1 500 *	1.0	✓	0.24	100
1.6	189 140.1.6	200	5.2	1 500 *	1.1	✓	0.24	100
2	189 140.2	180	10	1 500 *	1.2	✓	0.24	100
2.5	189 140.2.5	160	19	1 500 *	1.3	✓	0.24	100
3.15	189 140.3.15	150	37	1 500 *	1.4	✓	0.24	100
4	189 140.4	140	68	1 500 *	1.5	✓	0.24	100
5	189 140.5	135	80	1 500 *	2.2	✓	0.24	100
6.3	189 140.6.3	110	215	1 500 *	2.2	✓	0.24	100
8 <sup>1</sup>	189 140.8	110	370	1 500 *	2.6	✓	0.24	100
10 <sup>1</sup>	189 140.10	100	620	1 500 *	3.0	✓	0.24	100
12.5 <sup>1</sup>	189 140.12.5	100	1 300	1 500 *	3.5	✓	0.24	100
16 <sup>1</sup>	189 140.16	100	2 500	1 500 *	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 <sup>2</sup> ts-value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	cURus UR	Weight [kg/100]	Pack
20 <sup>1</sup>	189 140.20	100	3 400	1 500	6		0.24	100
25 <sup>1</sup>	189 140.25	100	5 600	1 500	8		0.24	100

Size  
**6.3 x 32 mm**

Rated Voltage  
**250 V**

Time Lag

Standard  
**Not Standardized**

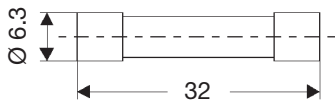
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> ts-value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	cURus UR	Weight [kg/100]	Pack
32 <sup>1</sup>	189 140.32	80	3 900	1 500	10		0.24	100

<sup>1</sup> Consideration should be given to heat dissipation.

\* @ 500 V and 10 kA @ 440 V DC



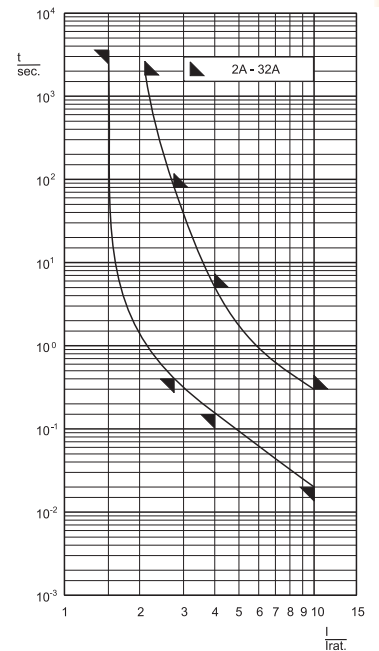
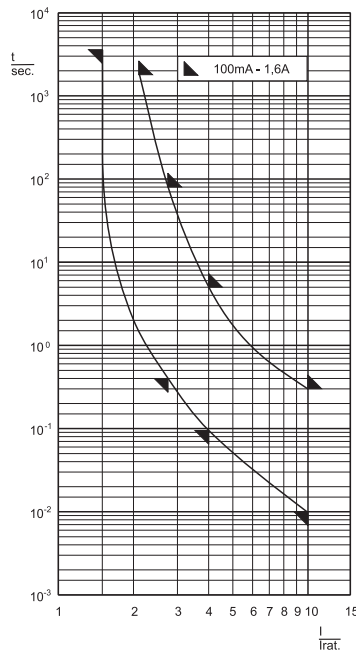
**Miniature Fuses**  
Ceramic Tube **T**

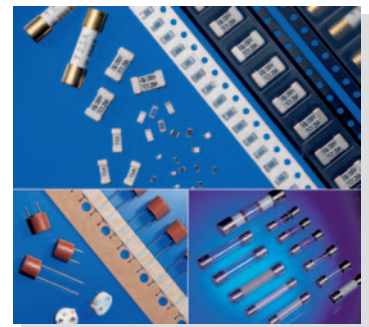


**Pre-Arcing Time Limits**

Rated Current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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

**189.140**





**Miniature Fuses**  
Glass Tube

**T**

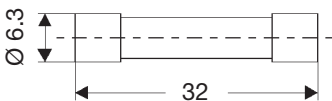
Size **6.3 x 32 mm**      Rated Voltage **250 V**      Time Lag      Standard **Not Standardized**

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

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

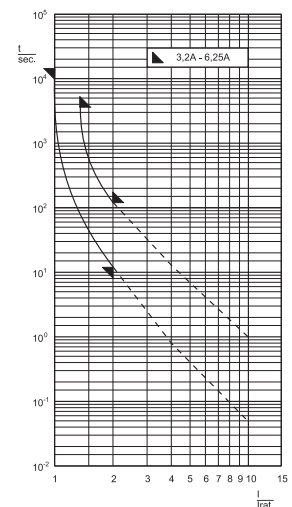
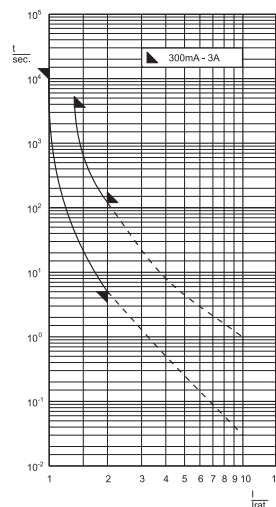
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	cULus	Weight [kg/100]	Pack
4	189 500.4	200	590	100 <sup>1</sup>	1.1	✓	0.1	100
5	189 500.5	200	600	100 <sup>1</sup>	1.3	✓	0.1	100
6.25	189 500.6.3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

<sup>1</sup> 10.000 A @ 125 V AC

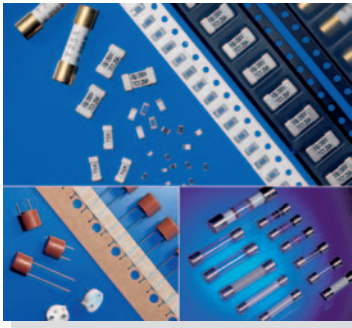


**Pre-Arcing Time Limits**

Rated Current		1.0 I <sub>n</sub>	1.35 I <sub>n</sub>	2.0 I <sub>n</sub>
300 mA				5 s
3.2 A (250 V)				120 s
4 A	-	> 4 h	< 1 h	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 <sup>2</sup> ts-value [A <sup>2</sup> 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**

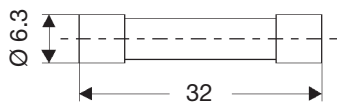
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> ts-value [A <sup>2</sup> s]	Rated Breaking Capacity [kA]	Power Dissipation [W]	cURus	Weight [kg/100]	Pack
2.5	70 125 40.2.5	800	1.2	50	2.7	✓	0.24	100
3.15	70 125 40.3.15	700	2	50	3.0	✓	0.24	100
4	70 125 40.4	500	5	50	3.2	✓	0.24	100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

<sup>1</sup> Consideration should be given to heat dissipation.



**Miniature Fuses**  
Ceramic Tube

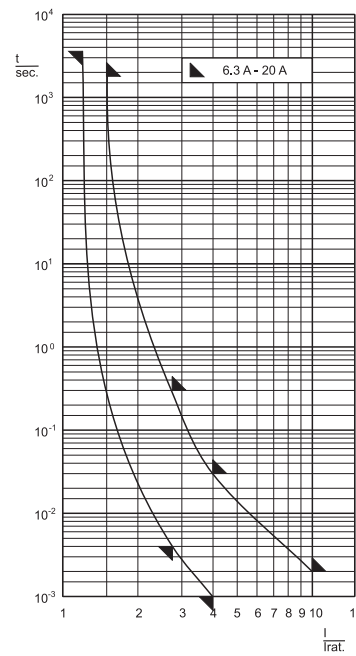
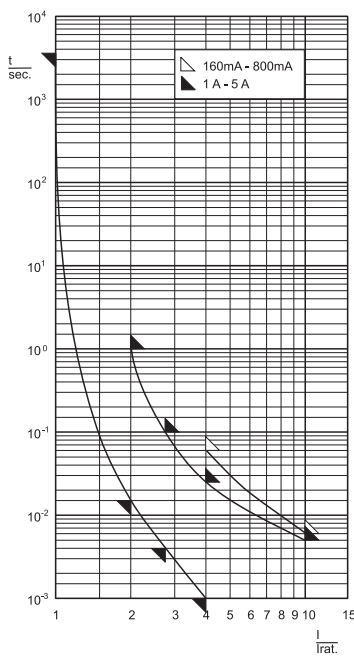
**FF**

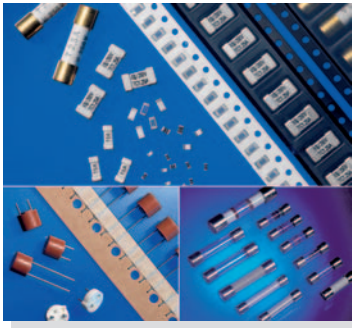


**Pre-Arcing Time Limits**

Rated Current	1.0 I <sub>rat</sub>	1.2 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
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 <sub>rat</sub>	1.5 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
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

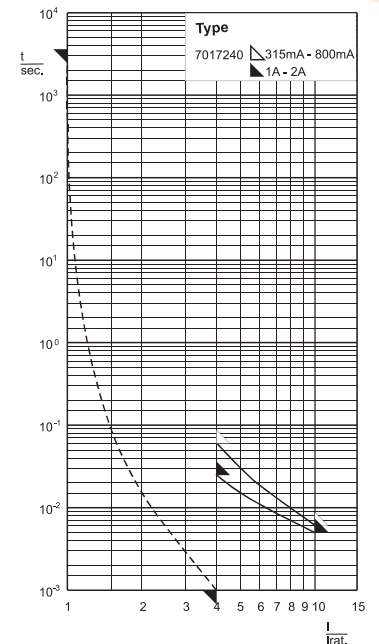
**aR (FF)**

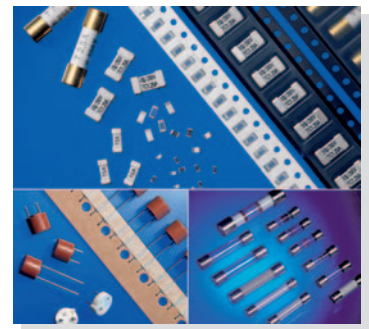
Size **6.3 x 32 mm**      Rated Voltage **1000 V**      **Very Fast Acting**      Standard

Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> ts-value [A <sup>2</sup> 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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
315 mA	> 1 h	-	-	< 60 ms	< 6 ms
800 mA			-	< 6 ms	
1 A	> 1 h	-	-	1 ms	< 6 ms
2 A			-	25 ms	





## Miniature Fuses with Indicator

### Ceramic Tube

F

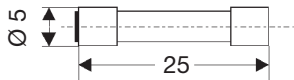
 Size  
**5 x 25 mm**

 Rated Voltage  
**250 V**
**Fast Acting**

 Standard  
**DIN 41576 Part 1**

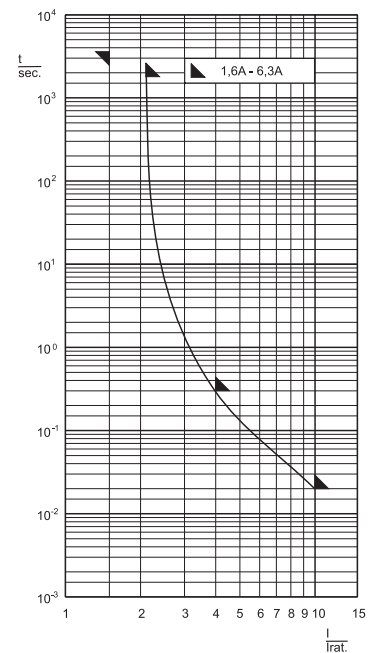
Rated Current [A]	Part No.	Voltage Drop [mV]	Color Code	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
1.6	171 526.1.6	640	orange	1 500	0.13	100
2	171 526.2	420	blue	1 500	0.13	100
2.5	171 526.2.5	320	yellow	1 500	0.13	100
3.15	171 526.3.15	250	black	1 500	0.13	100
4	171 526.4	200	brown	1 500	0.13	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

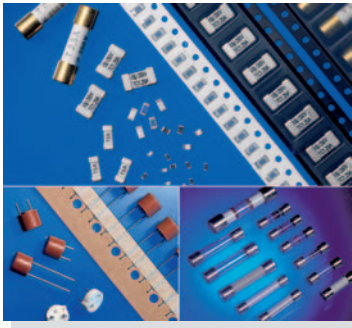
(...) = not standardized



### 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





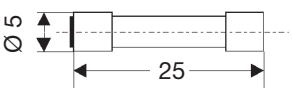
**Miniature Fuses with Indicator**  
Ceramic Tube

M

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

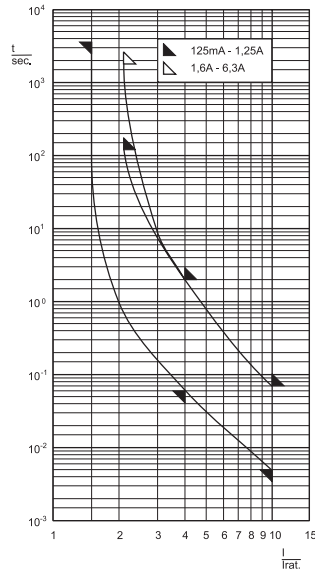
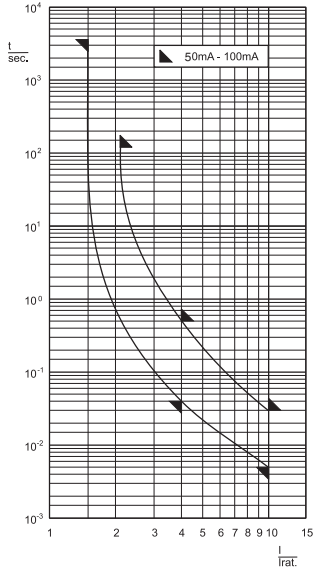
Rated Current [A]	Part No.	Voltage Drop [mV]	Color Code	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.050	172 526.0.050	520	white	80	0.15	100
0.063	172 526.0.063	520	green	80	0.15	100
0.080	172 526.0.080	520	grey	80	0.15	100
0.100	172 526.0.100	500	red	80	0.15	100
0.125	172 526.0.125	500	violet	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 <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	> 1 h	< 2 min.	-	40 ms	5 ms
100 mA				500 ms	30 ms
125 mA				60 ms	5 ms
1.5 A	< 30 min.	-	-	2 s	70 ms
1.6 A					
6.3 A					





**Miniature Fuses with Indicator**  
Ceramic Tube

**M**

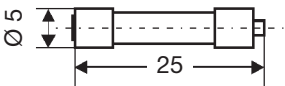
Size  
**5 x 25 mm**

Rated Voltage  
**250 V**

**Medium Time Lag**

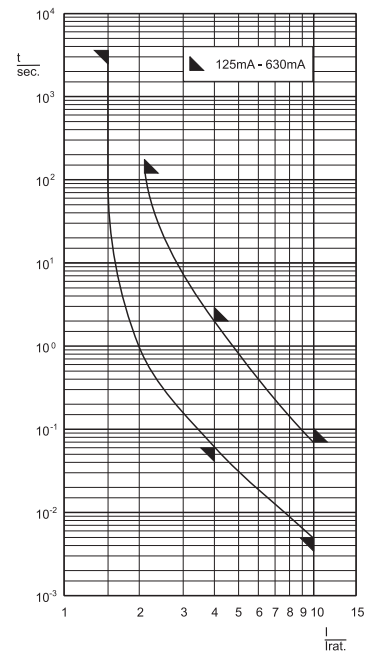
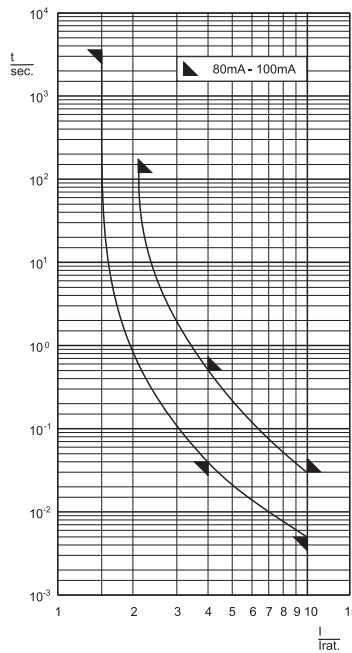
Standard  
**DIN 41577 Part 2**

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 <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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



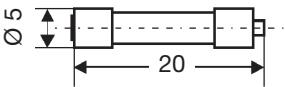


**Miniature Fuses with Indicator**  
Ceramic Tube **M**

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

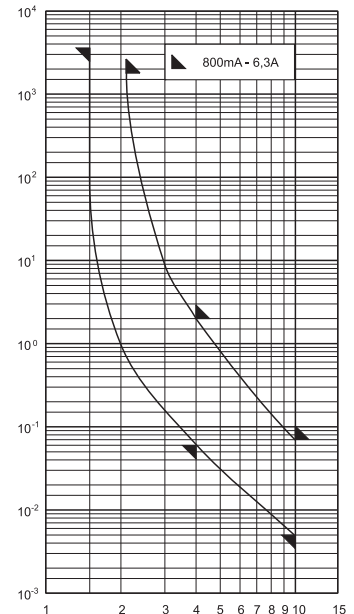
Rated Current [A]	Part No.	Voltage Drop [mV]	Color Code	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.800	70 014 07.0.800	520	grey	1 500	0.15	100
1	70 014 07.1	470	red	1 500	0.15	100
1.25	70 014 07.1.25	400	violet	1 500	0.15	100
1.6	70 014 07.1.6	400	orange	1 500	0.15	100
2	70 014 07.2	380	blue	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 <sup>1</sup>	70 012 05.6.3	380	green	1 500	0.15	100

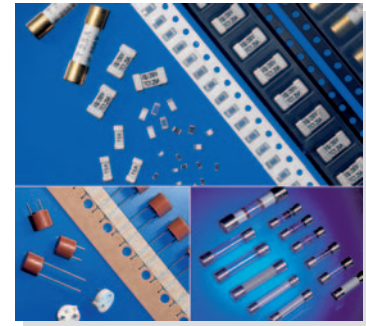
<sup>1</sup> without fitting device



**Pre-Arcing Time Limits**

Rated Current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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**

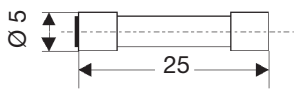
Rated Voltage  
**450 V**

**Fast Acting**

**Lloyds Registered**

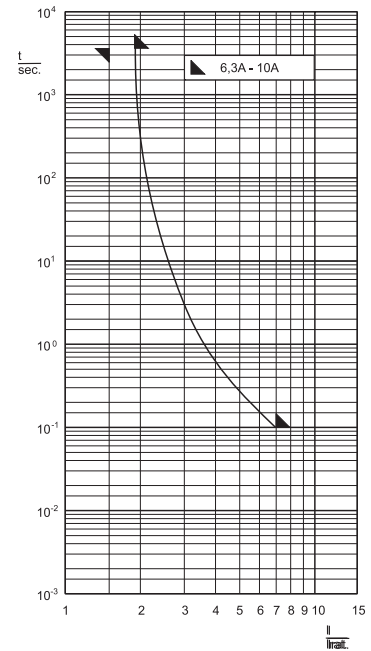
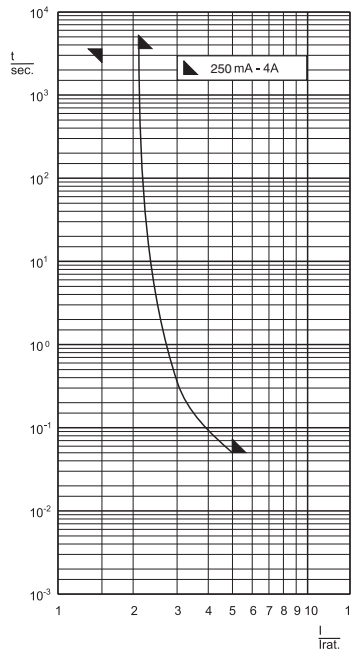
Rated Current [A]	Part No.	Voltage Drop [mV]	Color Code	Rated Breaking Capacity [kA]	Weight [kg/100]	Pack
0.250	70 089 13.0.250	980	yellow	70	0.13	100
0.315	70 089 13.0.315	900	black	70	0.13	100
0.400	70 089 13.0.400	800	brown	70	0.13	100
0.500	70 089 13.0.500	700	white	70	0.13	100
1	70 089 13.1	300	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

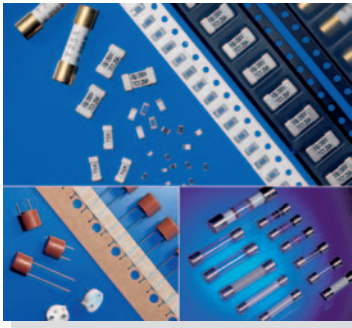


**Pre-Arcing Time Limits**

Rated Current	1.5 I <sub>n</sub>	1.9 I <sub>n</sub>	2.1 I <sub>n</sub>	5 I <sub>n</sub>	7 I <sub>n</sub>
250 mA	> 1 h	-	< 1 h	< 0.05 s	-
4 A		-	-	-	-
6.3 A	> 1 h	< 1 h	-	-	< 0.1 s
10 A		-	-	-	-



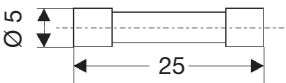




**Miniature Fuses**  
Glass Tube **F**

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

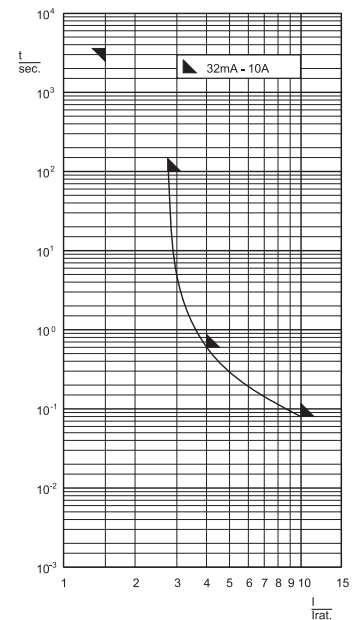
Rated Current [A]	Part No.	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.032	171 525.0.032	50	0.12	100
0.050	171 525.0.050	50	0.12	100
0.063	171 525.0.063	50	0.12	100
0.080	171 525.0.080	50	0.12	100
0.100	171 525.0.100	50	0.12	100
0.125	171 525.0.125	50	0.12	100
0.160	171 525.0.160	50	0.12	100
0.200	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

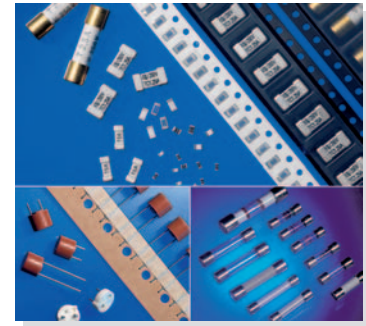


**Pre-Arcing Time Limits**

Part No. 171 525

Rated Current	1.5 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA ↓ 10 A	> 1 h	< 100 s	< 600 ms	< 80 ms





**Miniature Fuses**  
Glass Tube

**M**

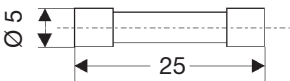
Size  
**5 x 25 mm**

Rated Voltage  
**250 V**

**Medium Time Lag**

Standard  
**Not standardized**

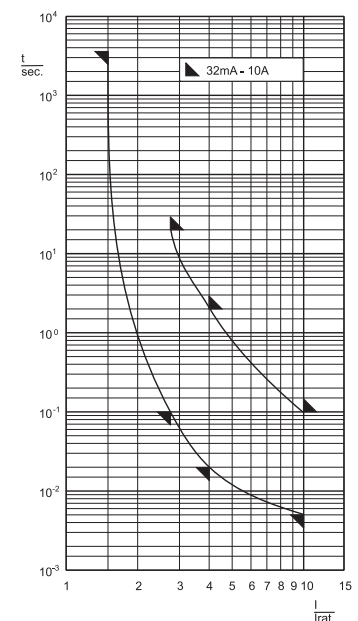
Rated Current [A]	Part No.	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.032	172 525.0.032	50	0.12	100
0.050	172 525.0.050	50	0.12	100
0.063	172 525.0.063	50	0.12	100
0.080	172 525.0.080	50	0.12	100
0.100	172 525.0.100	50	0.12	100
0.125	172 525.0.125	50	0.12	100
0.160	172 525.0.160	50	0.12	100
0.200	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

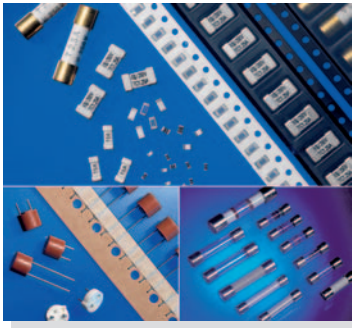


**Pre-Arcing Time Limits**

Part No. 172 525

Rated Current	1.5 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	100 ms	20 ms	5 ms
10 A		20 s	2 s	100 ms

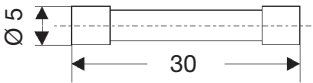




**Miniature Fuses**  
Glass Tube > 1.25 A with Filling **F**

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

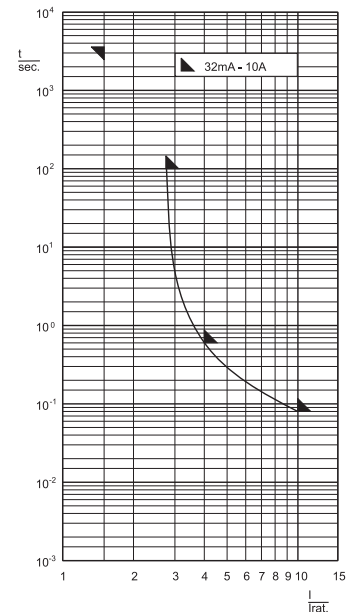
Rated Current [A]	Part No.	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.032	171 530.0.032	50	0.12	100
0.050	171 530.0.050	50	0.12	100
0.063	171 530.0.063	50	0.12	100
0.080	171 530.0.080	50	0.12	100
0.100	171 530.0.100	50	0.12	100
0.125	171 530.0.125	50	0.12	100
0.160	171 530.0.160	50	0.12	100
0.200	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

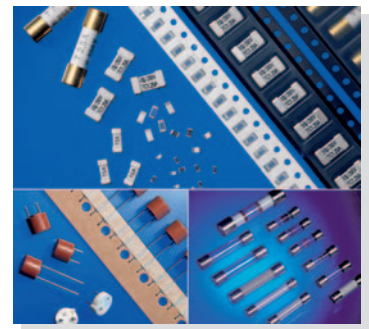


**Pre-Arcing Time Limits**

Part No. 171 530

Rated Current	1.5 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA ▼ 10 A	> 1 h	< 100 s	< 600 ms	< 80 ms





## Miniature Fuses

Glass Tube > 1.25 A with Filling

**M**

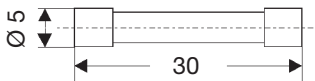
Size  
**5 x 30 mm**

Rated Voltage  
**500 V**

**Medium Time Lag**

Standard  
**Not Standardized**

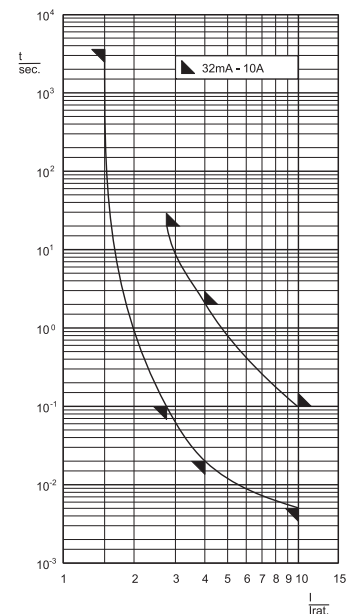
Rated Current [A]	Part No.	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.032	172 530.0.032	50	0.12	100
0.050	172 530.0.050	50	0.12	100
0.063	172 530.0.063	50	0.12	100
0.080	172 530.0.080	50	0.12	100
0.100	172 530.0.100	50	0.12	100
0.125	172 530.0.125	50	0.12	100
0.160	172 530.0.160	50	0.12	100
0.200	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

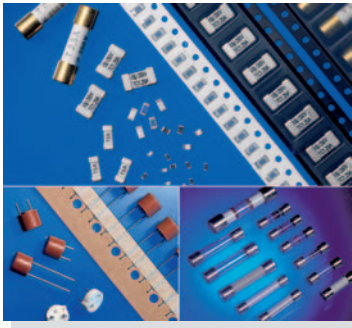


### Pre-Arcing Time Limits

Part No. 172 530

Rated Current	$1.5 I_n$	$2.75 I_n$	$4 I_n$	$10 I_n$
32 mA	> 1 h	50 ms	20 ms	5 ms
10 A		30 s	2 s	100 ms





## Miniature Fuses

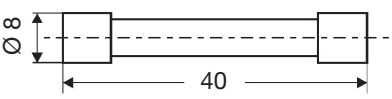
Glass Tube

M+F

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

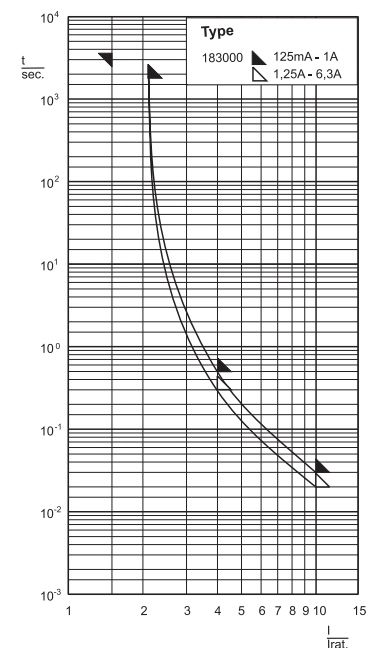
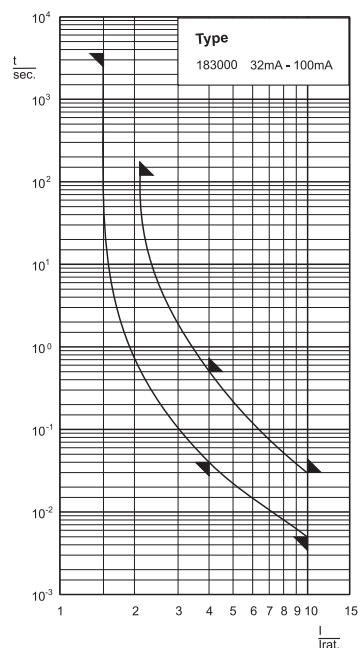
Rated Current [A]	Part No.	Voltage Drop [mV]	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s]	Rated Breaking Capacity [A]	Power Dissipation [W]	Weight [kg/100]	Pack
<b>M</b> 0.032	183 000.0.032	2 300	*	80	*	0.5	25
0.050	183 000.0.050	1 600	*	80	*	0.5	25
0.063	183 000.0.063	1 300	*	80	*	0.5	25
0.080	183 000.0.080	950	*	80	*	0.5	25
0.100	183 000.0.100	700	*	80	*	0.5	25
<b>F</b> 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 <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
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					
1.25 A	> 1 h	< 30 min.	-	<300 ms	< 30 ms
6.3 A					





## Miniature Fuses

Glass Tube > 100 mA Ceramic Tube

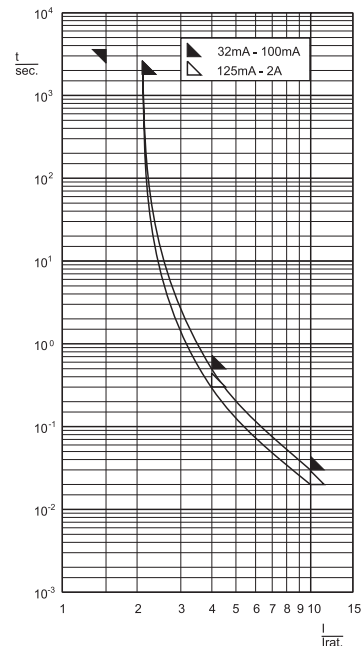
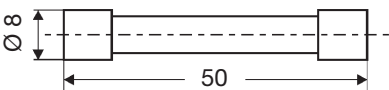
Size  
**8 x 50 mm**

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			< 300 ms	< 20 ms
125 mA				
2 A				



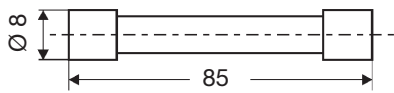
## Miniature Fuses

### Ceramic Tube

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

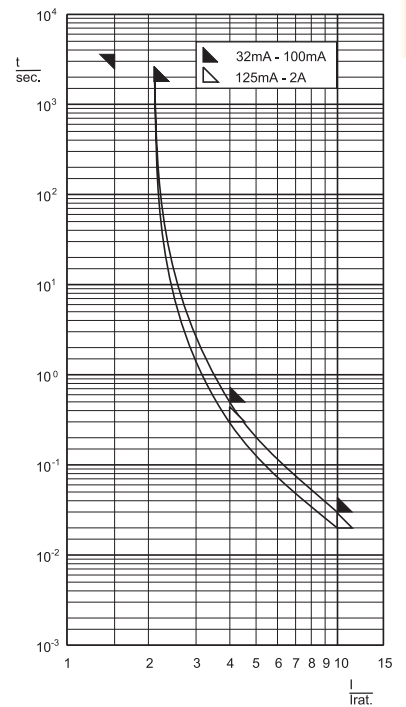
Rated Current [A]	Part No.	Voltage Drop [mV]	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.032	185 000.0.032	4 500	35	0.43	50
0.050	185 000.0.050	3 000	35	0.43	50
0.063	185 000.0.063	2 400	35	0.43	50
0.080	185 000.0.080	1 900	35	0.43	50
0.100	185 000.0.100	1 500	35	0.43	50
0.125	185 000.0.125	17 000	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

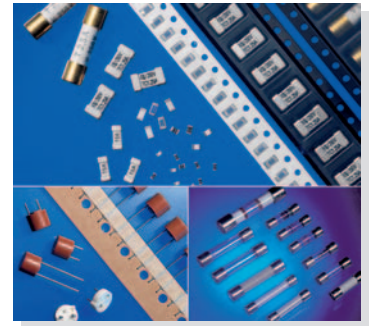
(...) = not standardized



#### Pre-Arcing Time Limits

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





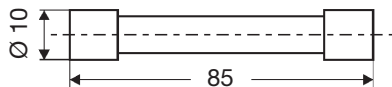
## Miniature Fuses

### Ceramic Tube

Size  
**10 x 85 mm**

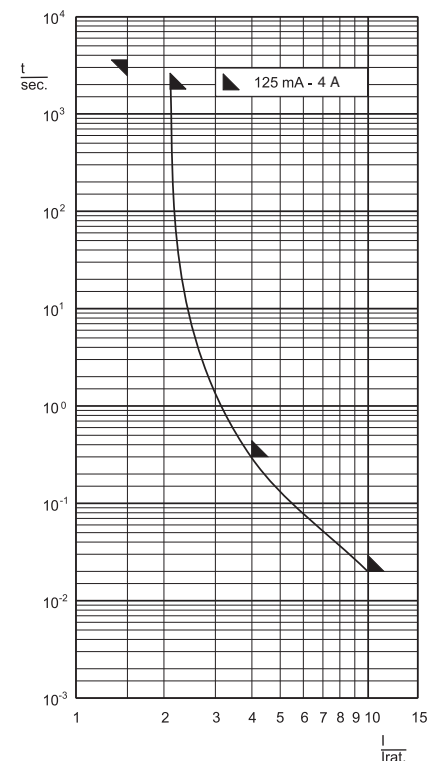
Rated Voltage  
**3 kV**

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

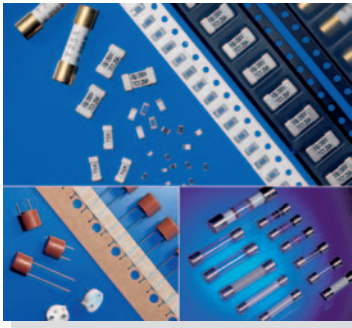


### Pre-Arcing Time Limits

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





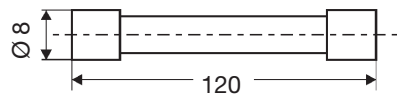


**Miniature Fuses**  
Glass Tube > 100 mA Ceramic Tube

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

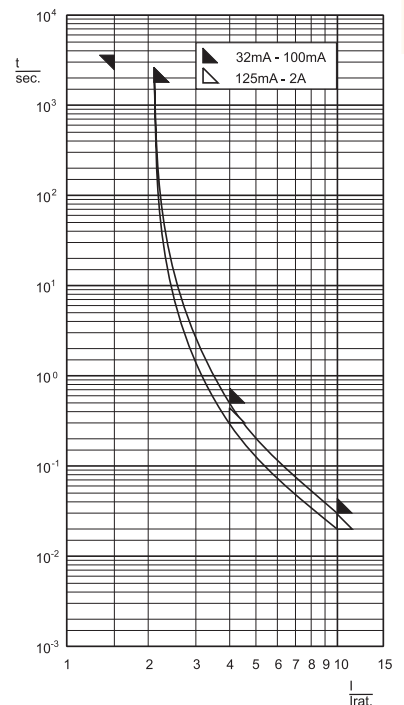
Rated Current [A]	Part No.	Voltage Drop [mV]	Rated Breaking Capacity [A]	Weight [kg/100]	Pack
0.032	186 000.0.032	6 000	35	0.52	50
0.050	186 000.0.050	4 400	35	0.52	50
0.063	186 000.0.063	3 800	35	0.52	50
0.080	186 000.0.080	3 200	35	0.52	50
0.100	186 000.0.100	2 900	35	0.52	50
0.125	186 000.0.125	22 000	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 <sub>n</sub>	2.1 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	< 30 min.	< 500 ms	< 30 ms
100 mA			< 300 ms	< 20 ms
125 mA				
2 A				





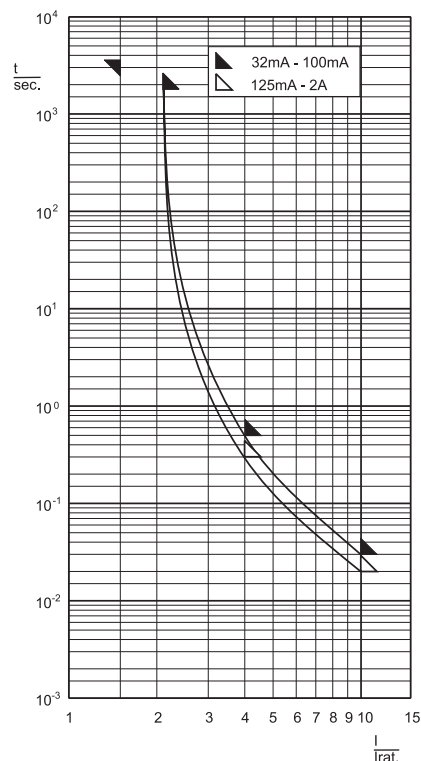
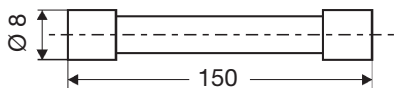
**Miniature Fuses**  
Ceramic Tube

Size  
**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

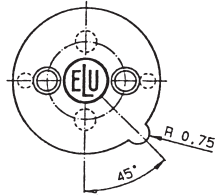
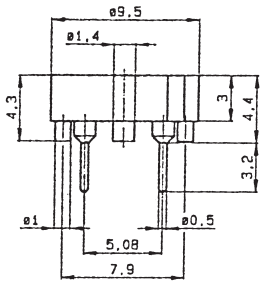


**Pre-Arcing Time Limits**

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**

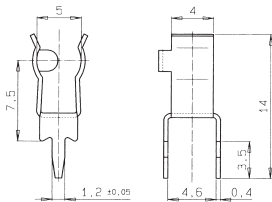
Rated Voltage [V]	Part No.	Mounting	Pin Distance [mm]	Hole Ø [mm]	Connections
250	166 602	Printed circuit board	5.08	1	Solder



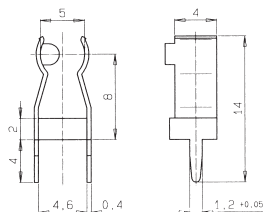
**Fuse clips** For Fuse-Links Cap Size **5 + 6.3 mm Ø** Rated Current **6.3 A** Other Types on Request

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

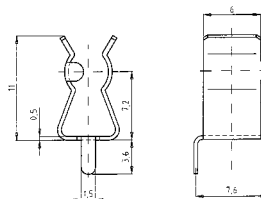
**199 073**



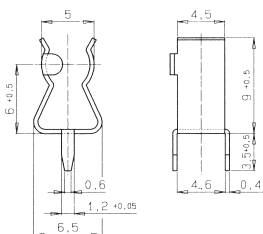
**199 207**



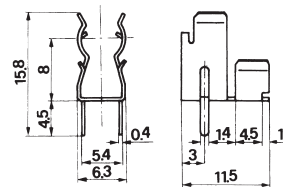
**199 429**



**199 487**



**199 488**



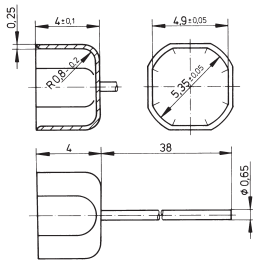
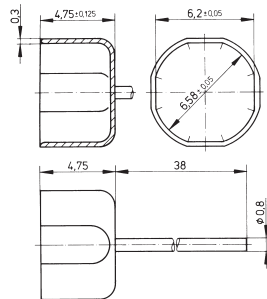
## Push-On caps

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

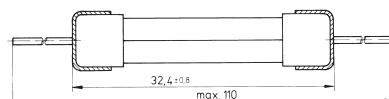
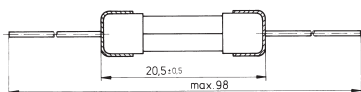
Rated Current

**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**


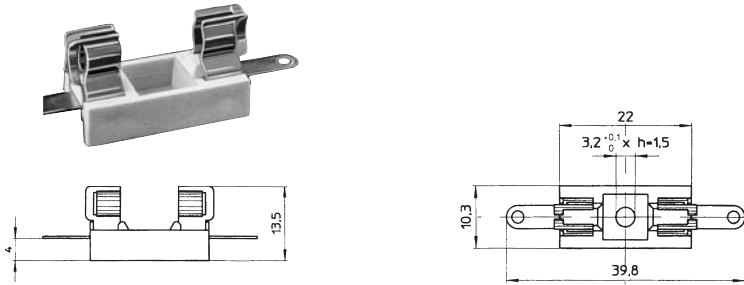
Below we show the assembly of 5 x 20 or 6.3 x 32 mm fuse links with caps. You can order this completely assembled unit by adding the letters "AK" at the end of the article No..



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

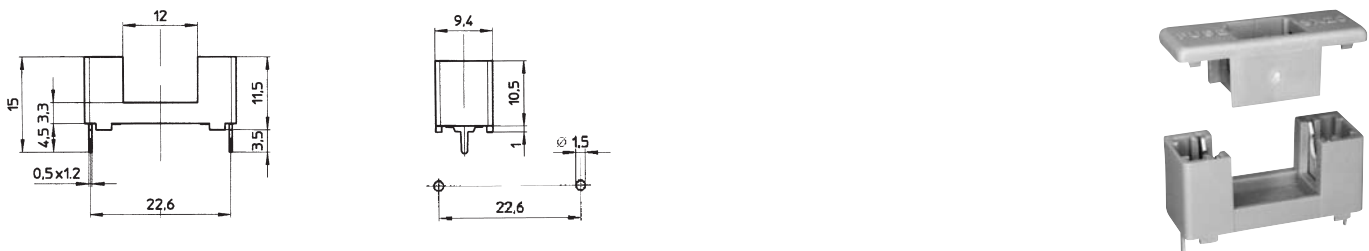
Rated Voltage [V]	Part No.	Mounting	Connections
250	199 010	Printed circuit board, screw or rivet	Solder or plug

**199.010**

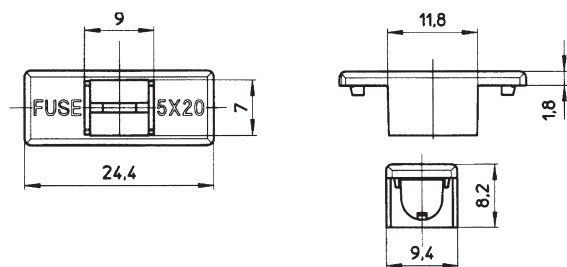


**Fuse-Holders** For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

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

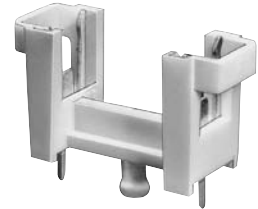
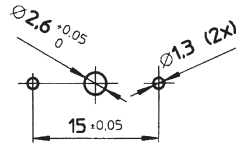
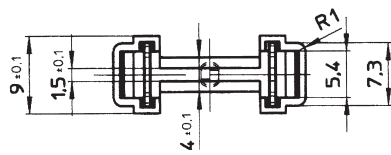
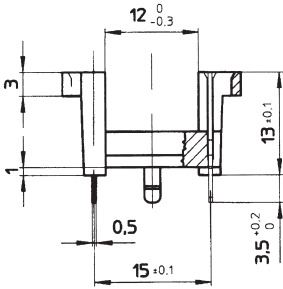


**Cover 199 019** For Fuse-Holder 199.018



**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

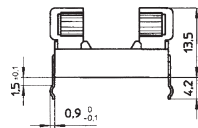
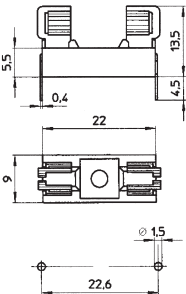


**Fuse-Holders** For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

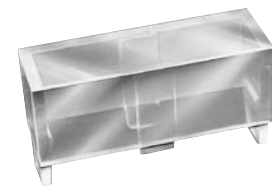
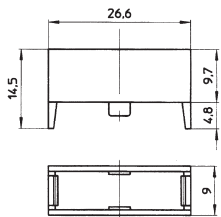
Rated Voltage [V]	Part No.	Mounting	Pin Distance [mm]	Hole Ø [mm]	Connections
250	199 015	Printed circuit board	22.5	1.5	Solder
250	199 015 A	Printed circuit board	22.5	1.5	Solder

**199.015**

**199.015 A**

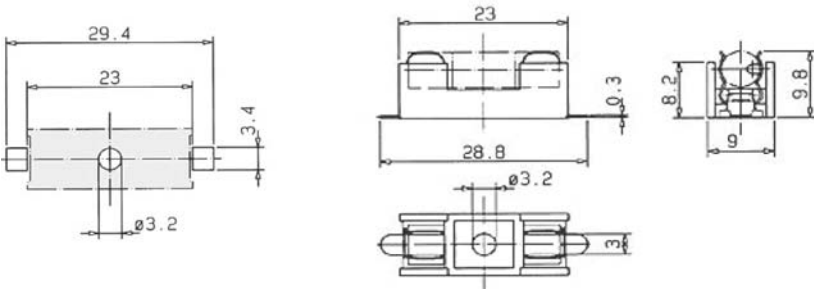


**Cover 199 016** For Fuse-Holders 199.015 / 199.015 A

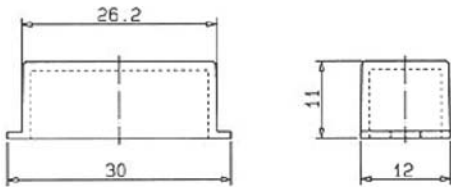


**Fuse-Holders SMD** For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A**

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

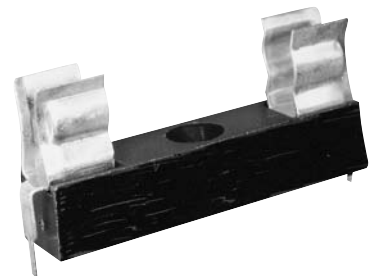
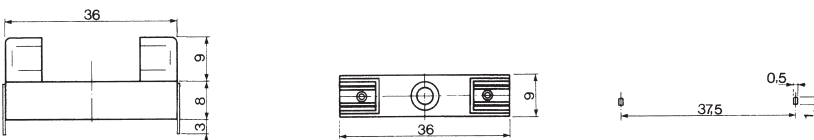


**Cover 199 012** For Fuse-Holders 199.011



**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



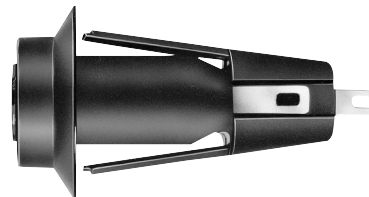
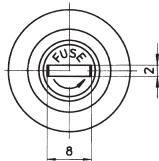
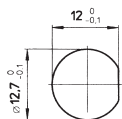
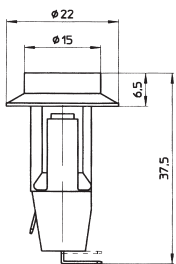
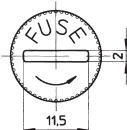
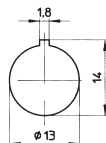
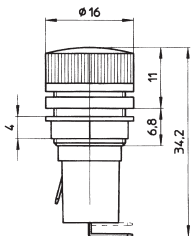
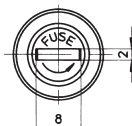
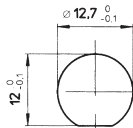
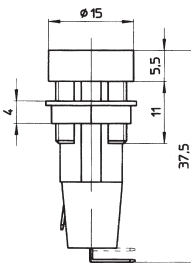
**Fuse-Holders (Screw Cap)**

 For Fuse-Links Size  
**5 x 20 mm**

 Rated Current  
**6.3 A**

 Protection Class  
**IP 40**

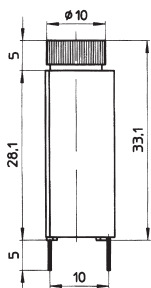
Rated Voltage [V]	Part No.	Mounting	Hole Ø [mm]	Connections
250	199 040	Panel, with flat as shown, snap-in	12.7	Solder or plug
250	199 030	Panel, locating lug, locknut SW 14	13	Solder or plug
250	199 035	Panel, with flat as shown, locknut SW 14	12.7	Solder or plug

**199 040**

**199 030**

**199 035**


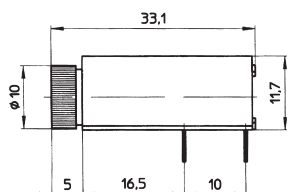
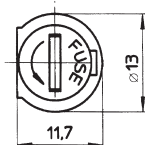
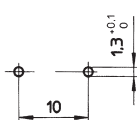


**Fuse-Holders (Bayonet Cap)** For Fuse-Links Size **5 x 20 mm** Rated Current **6.3 A** Protection Class **IP 40**

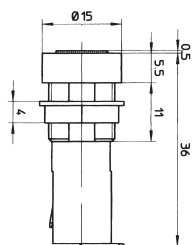
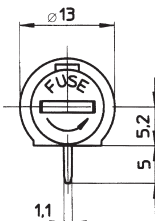
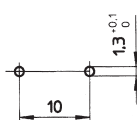
Rated Voltage [V]	Part No.	Mounting	Pin Distance [mm]	Hole Ø [mm]	Connections
250	199 045	Printed circuit board, vertical mounting	10	1.3 + 0.1	Solder
250	199 050	Printed circuit board, horizontal mounting	10	1.3 + 0.1	Solder
250	199 055	Panel, with flat as shown, locknut SW 14		12.7	Solder or plug
250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



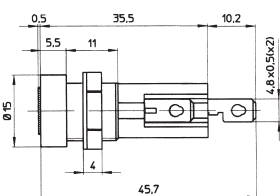
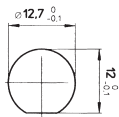
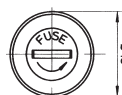
**199 045**



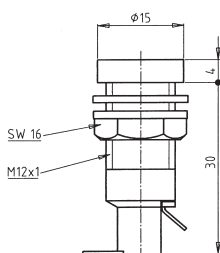
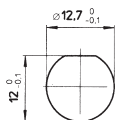
**199 050**



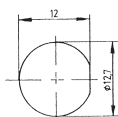
**199 055**



**199 070**



**199 090**



**Fuse-Holder**

 For Fuse-Links Size  
**5 x 20 mm**

 Rated Current  
**6.3 A**
**Rated Voltage**  
**[V]**

42

**Part No.**

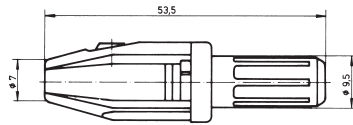
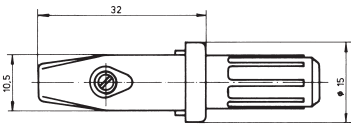
199 081

**Mounting**

In-line fuse holder, bayonet locking

**Connections**

Solder or screw


**Fuse-Holder (Screw Cap)**

 For Fuse-Links Size  
**6.3 x 32 mm**

 Rated Current  
**15 A**

 Protection Class  
**IP 40**
**Rated Voltage**  
**[V]**

250

**Part No.**

199 043

**Mounting**

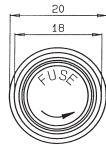
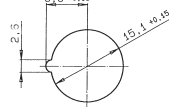
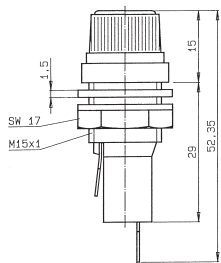
Panel, locating lug, locknut SW 17

**Hole Ø**  
**[mm]**

15.1

**Connections**

Solder or plug


**Fuse-Holder (Screw Cap)**

 For Fuse-Links Size  
**6.3 x 32 mm**

 Rated Current  
**20 A**

 Protection Class  
**IP 40**
**Rated Voltage**  
**AC**

250 V

**Part No.**

199 052

**Mounting**

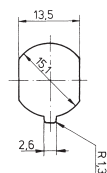
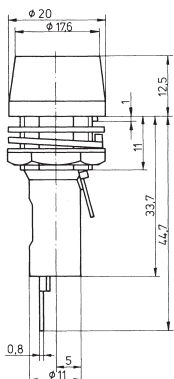
Panel, locating lug, locknut SW 18

**Hole Ø**  
**mm**

15.1

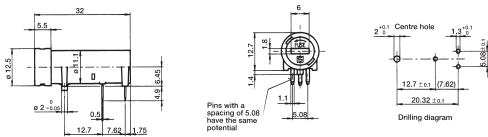
**Connections**

Solder



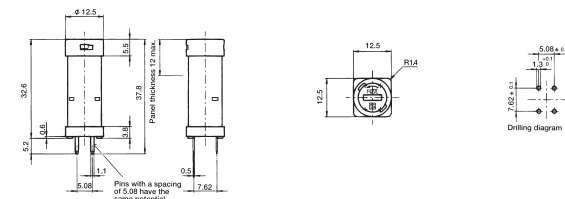
**Fuse-Holder with Contact Protection** For Fuse-Links Size **5 x 20 mm** Rated Current **10/16 A**

Rated Voltage [V]	Part No.	Mounting	Hole Ø [mm]	Connections
250	71 001 27	Printed circuit board	1.3	Solderable



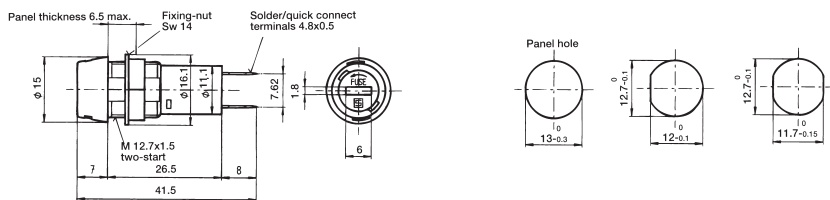
**Fuse-Holder with Contact Protection** For Fuse-Links Size **5 x 20 mm** Rated Current **10/16 A**

Rated Voltage [V]	Part No.	Mounting	Hole Ø [mm]	Connections
250	71 001 28	Printed circuit board	1.3	Solderable



**Fuse-Holder with Contact Protection** For Fuse-Links Size **5 x 20 mm** Rated Current **10/16 A**

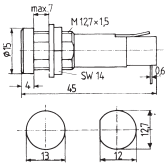
Rated Voltage [V]	Part No.	Mounting	Hole Ø [mm]	Connections
250	71 001 29	Panel	13	Solder





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)

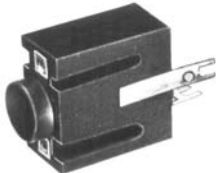
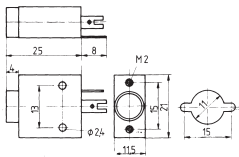


**72.001.09** (6.3 x 32 mm)



For Fuse-Links Size Rated Current  
**Fuse-Holder without Contact Protection** **5 x 20 mm + 6.3 x 32 mm** **10/20 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)



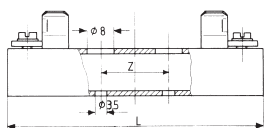
**72 001 06** (6.3 x 32 mm)



with glass window

For Fuse-Links Size Rated Current  
**Fuse-Holder Open Type** **5 x 20 mm + 5 x 25 mm** **6.3 A**

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

