

 **DAINFUSE**

Circuit Protection Solution
www.dainfuse.com

ELECTRONIC DESIGNERS
GUIDE

HISTORY



- 1988. 10 다인전기설립(삼주전기임가공생산)
- 1995. 02 다인정밀 설립(Fuse 부속품 자동화 개발 및 생산)
- 1997. 05 삼주리틀 Fuse 생산(리틀휴즈→삼주전기 인수 합병)
- 1998. 10 Micro Fuse 자동화 개발 생산
- 2000. 03 Micro Fuse Tapping 개발 생산
- 2002. 12 다인휴즈로 상호변경(삼주리틀 국내생산 철수로 독립)
- 2003. 03 전기 용품 안전인증 
- 2003. 07 미국 UL 인증 
- 2003. 07 캐나다 CSA 인증 
- 2003. 08 ISO9001 품질경영시스템 인증
(KS A 9001:2001 / ISO9001:2000) 
- 2003. 09 50CT, 50T VDE 인증(유럽 통합규격 CB) 

 DAINFUSE



DAINFUSE

41N/42N

51NM/52NM

51S/52S

50T

50CT

61NM/62NM

65TS

22M

FUSE CLIPS

FUSE BLOCK & HOLDER

www.dainfuse.com



41N/42N

GLASS TUBE FUSE (Non-time Delay)



TEST SPECIFICATION

% of Ampere Rating	Opening Time
110 %	4 hours, Minimum
135 %	1 hour, Maximum
200 %	2 min, Maximum

UL File No.

41N	125V 300mA-3.5A (Listed)
42N	250V 300mA-3.5A (Listed) 4A-6.3A (Recognized)

CSA Certified file No.

41N	125V 300mA-3.5A (Listed) 4A-6.3A (Recognized)
42N	250V 300mA-3.5A (Listed) 4A-6.3A (Recognized)

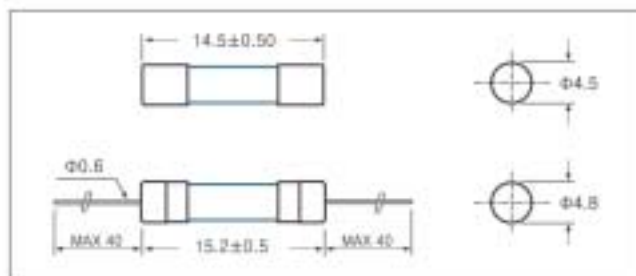
Interrupting Rating

10,000 amperes at 125V AC (300mA-3.5A)	500 amperes at 125V AC (4A-6.3A)
35 amperes at 250V AC (300mA-1A)	100 amperes at 250V AC (1.2A-6.3A)

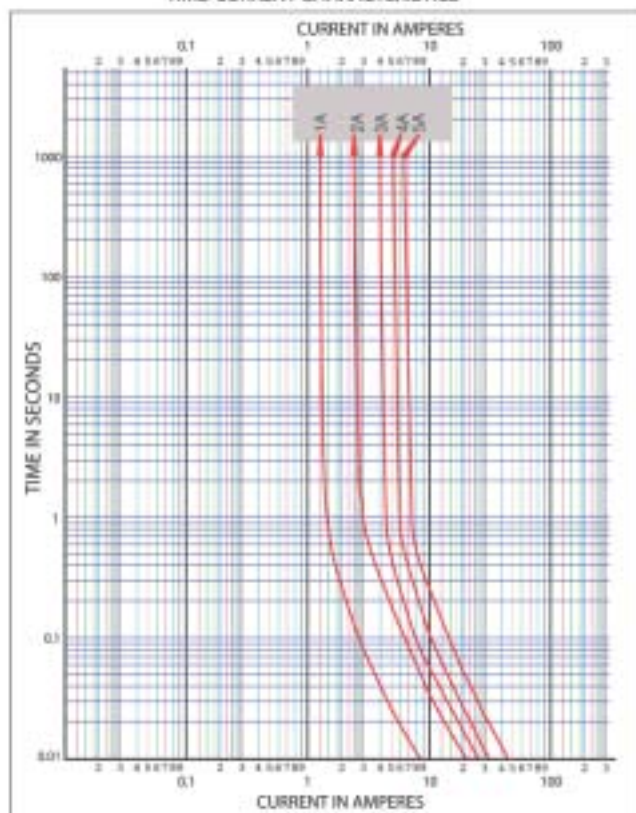
RATINGS

41N, 42N Cat. No.	Ampere
0300 H/L	300mA
0315 H/L	315mA
0350 H/L	350mA
0375 H/L	375mA
0400 H/L	400mA
0500 H/L	500mA
0600 H/L	600mA
0630 H/L	630mA
0750 H/L	750mA
0800 H/L	800mA
010 H/L	1A
013 H/L	1.25A
015 H/L	1.5A
016 H/L	1.6A
020 H/L	2A
025 H/L	2.5A
030 H/L	3A
032 H/L	3.15A
035 H/L	3.5A
040 H/L	4A
050 H/L	5A
060 H/L	6A
063 H/L	6.3A

H denotes for 250V
L denotes for 125V



TIME-CURRENT CHARACTERISTICS



51NM/52NM

GLASS TUBE FUSE (Non-time Delay)



TEST SPECIFICATION

% of Ampere Rating	Opening Time
110 %	4 hours, Minimum
135 %	1 hour, Maximum
200 %	2 min, Maximum

UL File No. E236987

51NM	125V 300mA-3.5A (Listed)
52NM	250V 300mA-3.5A (Listed) 4A-8A (Recognized)

CSA Certified file No. 1433145, 1438084

51NM	125V 300mA-3.5A (Listed) 4A-8A (Recognized)
52NM	250V 300mA-3.5A (Listed) 4A-8A (Recognized)

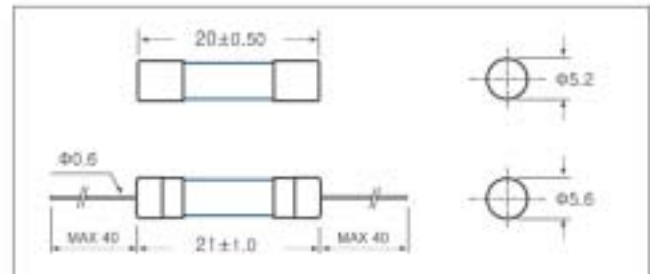
Interrupting Rating

10,000 amperes at 125V AC (300mA-3.5A)	500 amperes at 125V AC (4A-8A)
35 amperes at 250V AC (300mA-1A)	100 amperes at 250V AC (1.2A-8A)

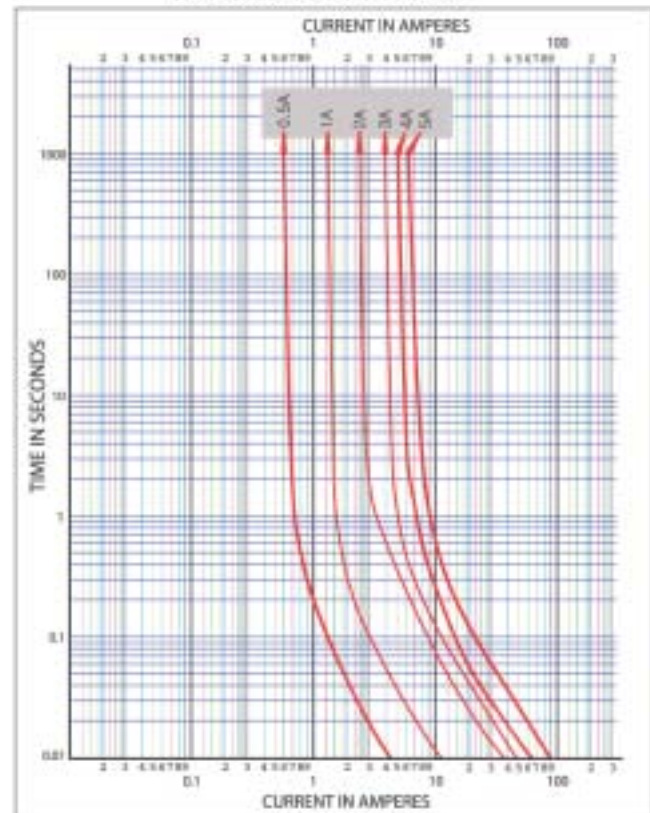
RATINGS

51NM, 52NM Cat. No.	Ampere
0300 H/L	300mA
0315 H/L	315mA
0350 H/L	350mA
0375 H/L	375mA
0400 H/L	400mA
0500 H/L	500mA
0600 H/L	600mA
0630 H/L	630mA
0750 H/L	750mA
0800 H/L	800mA
010 H/L	1A
013 H/L	1.25A
015 H/L	1.5A
016 H/L	1.6A
020 H/L	2A
025 H/L	2.5A
030 H/L	3A
032 H/L	3.15A
035 H/L	3.5A
040 H/L	4A
050 H/L	5A
060 H/L	6A
063 H/L	6.3A
070 H/L	7A
080 H/L	8A

H denotes for 250V
L denotes for 125V



TIME-CURRENT CHARACTERISTICS





51S/52S

GLASS TUBE FUSE (Slow-Blow)



TEST SPECIFICATION

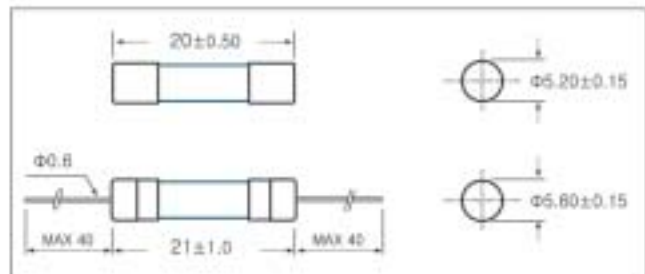
% of Ampere Rating	Opening Time
110 %	4 hours, Minimum
135 %	1 hour, Maximum
200 %	5sec-2 Minutes

UL File No. E236987

51S	125V 500mA-3.5A (Listed)
52S	250V 500mA-3.5A (Listed) 4A-8A (Recognized)

CSA Certified file No. 1433145, 1438084

51S	125V 500mA-3.5A (Listed) 4A-8A (Recognized)
52S	250V 500mA-3.5A (Listed) 4A-8A (Recognized)



Interrupting Rating

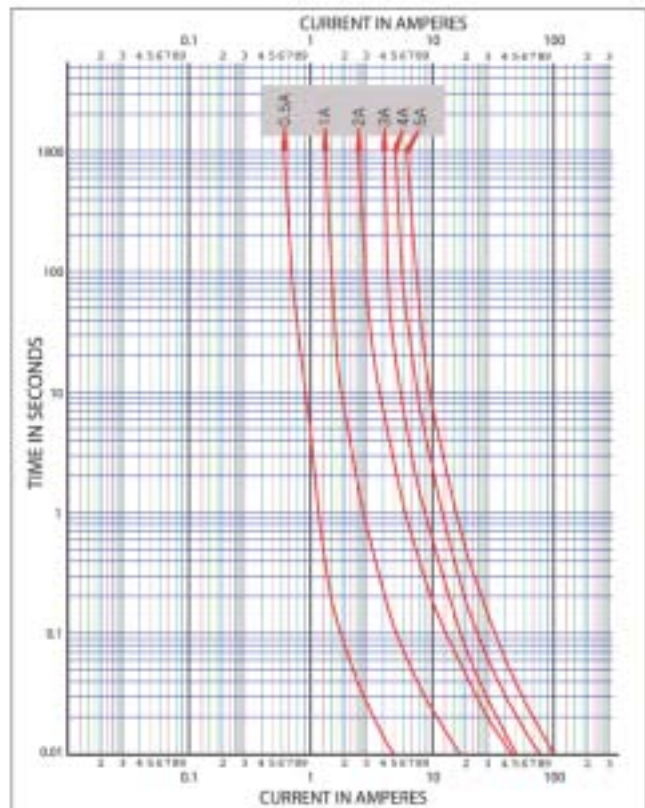
10,000 amperes at 125V AC (500mA-3.5A)	500 amperes at 125V AC (4A-8A)
35 amperes at 250V AC (500mA-1A)	100 amperes at 250V AC (1.2A-8A)

RATINGS

51S, 52S Cat. No.	Ampere
0500 H/L	500mA
0600 H/L	600mA
0630 H/L	630mA
0750 H/L	750mA
0800 H/L	800mA
010 H/L	1A
013 H/L	1.25A
015 H/L	1.5A
016 H/L	1.6A
020 H/L	2A
025 H/L	2.5A
030 H/L	3A
032 H/L	3.15A
035 H/L	3.5A
040 H/L	4A
050 H/L	5A
060 H/L	6A
063 H/L	6.3A
070 H/L	7A
080 H/L	8A

H denotes for 250V
L denotes for 125V

TIME-CURRENT CHARACTERISTICS



50T IEC 127. Standard Sheet 3

Time-Lag GLASS TUBE FUSE



TEST SPECIFICATION

% of Ampere Rating	Ampere Rating	Opening Time
150 %	.032-100	60 minutes, Minimum
	.125-6.3	60 minutes, Minimum
210 %	.032-100	2 minutes, Maximum
	.125-6.3	2 minutes, Maximum
275 %	.032-100	0.2 sec. Min.; 10 sec. Max.
	.125-6.3	0.6 sec. Min.; 10 sec. Max.
400 %	.032-100	.04 sec. Min.; 3 sec. Max.
	.125-6.3	.15 sec. Min.; 3 sec. Max.
1000 %	.032-100	.01 sec. Min.; 0.3 sec. Max.
	.125-6.3	0.02 sec. Min.; 0.3 sec. Max.

VDE File No. 40007771

50T	0.5A - 6.3A
-----	-------------

UL File No. E236987

50T	0.5A - 6.3A (Recognized)
-----	--------------------------

CSA Certified file No. 1438084

50T	0.5A - 6.3A (Recognized)
-----	--------------------------

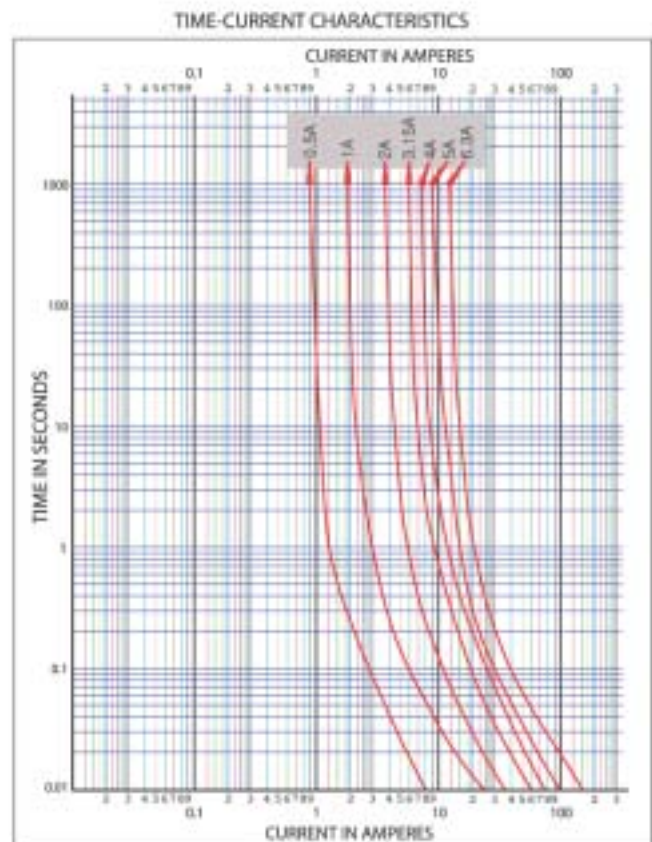
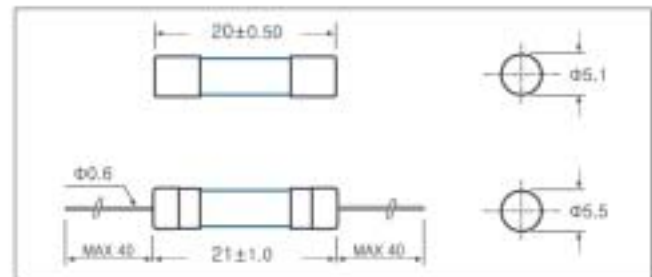
Breaking Capacity

35A or 10 In whichever is greater than 3.5A fuses

RATINGS

50T Cat. No.	Ampere	Max. Voltage drop, mV
0500 H	500mA	900
0630 H	630mA	300
0800 H	800mA	250
010 H	1A	150
013 H	1.25A	150
016 H	1.6A	150
020 H	2A	150
025 H	2.5A	120
032 H	3.15A	100
040 H	4A	100
050 H	5A	100
063 H	6.3A	100

H denotes for 250V



50CT IEC 127. Standard Sheet 5

Time-Lag CERAMIC TUBE FUSE



TEST SPECIFICATION

% of Ampere Rating	Ampere Rating	Opening Time
150 %	1 - 3.15	60 minutes, Minimum
	4 - 6.3	60 minutes, Minimum
210 %	1 - 3.15	30 minutes, Maximum
	4 - 6.3	30 minutes, Maximum
275 %	1 - 3.15	1 sec. Min.; 80 sec. Max.
	4 - 6.3	1 sec. Min.; 80 sec. Max.
400 %	1 - 3.15	.095 sec., Min.; 5 sec. Max.
	4 - 6.3	.150 sec., Min.; 5 sec. Max.
1000 %	1 - 3.15	.010 sec., Min.; .1 sec. Max.
	4 - 6.3	.020 sec., Min.; .1 sec. Max.

UL File No. E236987

50CT	1A - 6.3A (Recognized)
------	------------------------

CSA Certified file No. 1438084

50CT	1A - 6.3A (Recognized)
------	------------------------

VDE File No. 40008066

50CT	1A - 8A
------	---------

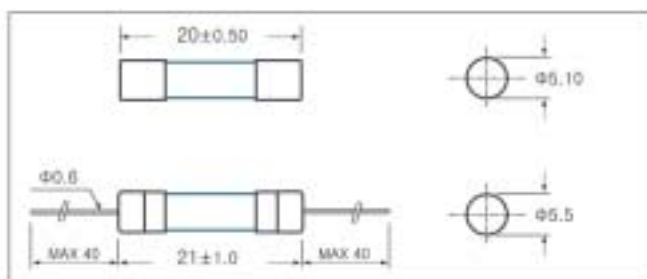
Breaking Capacity

1500A

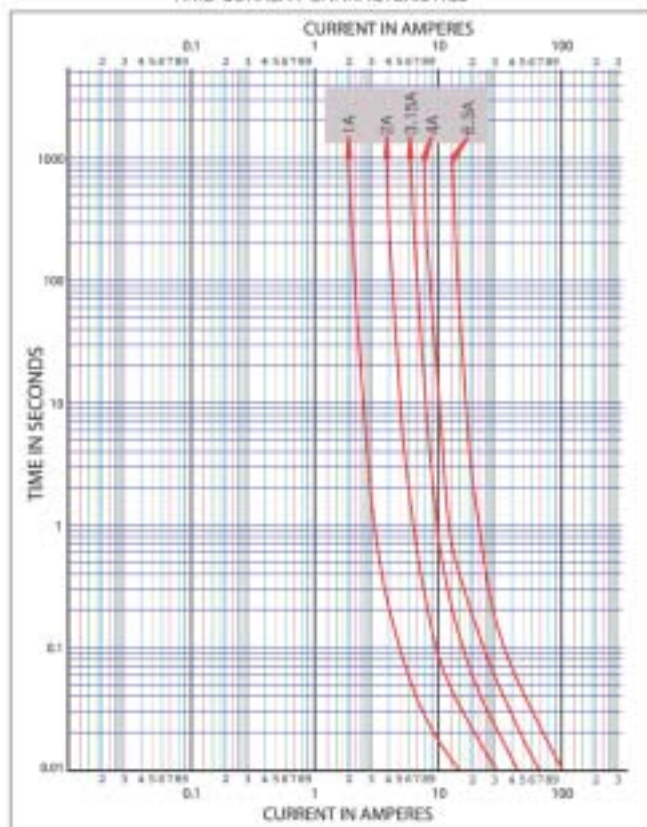
RATINGS

50CT Cat. No.	Ampere	Max. Voltage drop, mV
010 H	1A	250
013 H	1.25A	250
016 H	1.5A	200
020 H	2A	190
025 H	2.5A	180
032 H	3.15A	140
040 H	4A	100
050 H	5A	100
063 H	6.3A	100

H denotes for 250V



TIME-CURRENT CHARACTERISTICS



61NM/62NM

GLASS TUBE FUSE (Non-time Delay)



TEST SPECIFICATION

% of Ampere Rating	Opening Time
110 %	4 hours, Minimum
135 %	1 hour, Maximum
200 %	2 min, Maximum

UL File No.

61NM	125V 300mA - 10A
62NM	250V 300mA - 10A

CSA Certified file No.

61NM	125V 300mA - 10A
62NM	250V 300mA - 10A

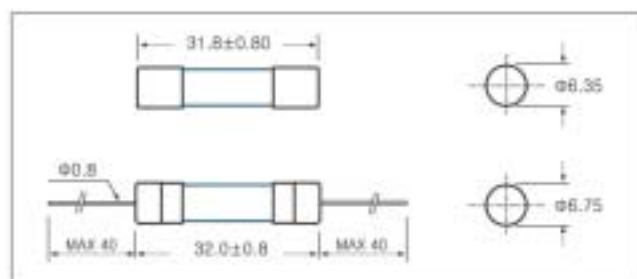
Interrupting Rating

10,000 amperes at 125V AC (300mA-10A)	35 amperes at 250V AC (300mA-1A)
100 amperes at 250V AC (1.2A-3.5A)	200 amperes at 250V AC (4A-10A)

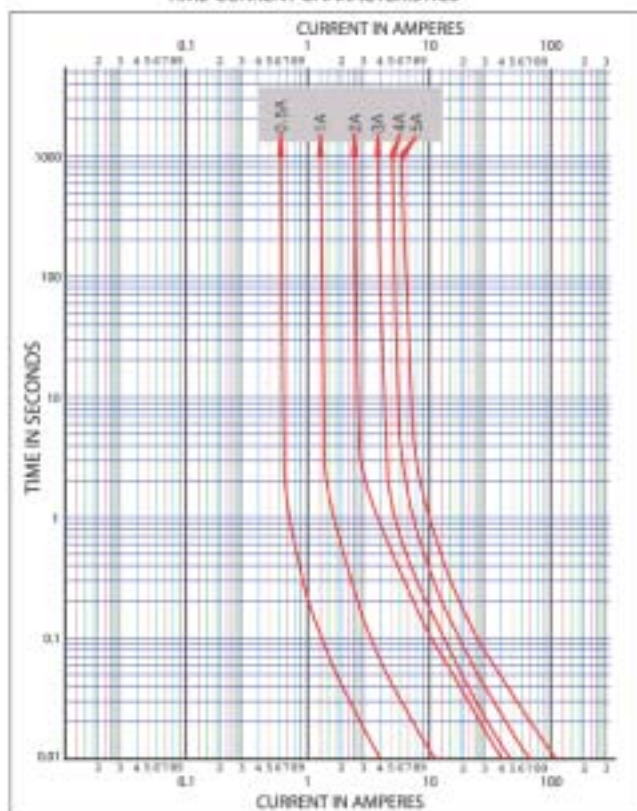
RATINGS

61NM, 62NM Cat. No.	Ampere
0300 H/L	300mA
0315 H/L	315mA
0350 H/L	350mA
0375 H/L	375mA
0400 H/L	400mA
0500 H/L	500mA
0600 H/L	600mA
0630 H/L	630mA
0750 H/L	750mA
0800 H/L	800mA
010 H/L	1A
013 H/L	1.25A
015 H/L	1.5A
016 H/L	1.6A
020 H/L	2A
025 H/L	2.5A
030 H/L	3A
032 H/L	3.15A
035 H/L	3.5A
040 H/L	4A
050 H/L	5A
060 H/L	6A
063 H/L	6.3A
070 H/L	7A
080 H/L	8A
100 H/L	10A

H denotes for 250V
L denotes for 125V



TIME-CURRENT CHARACTERISTICS





65TS

CERAMIC TUBE FUSE (Slow-Blow)



TEST SPECIFICATION

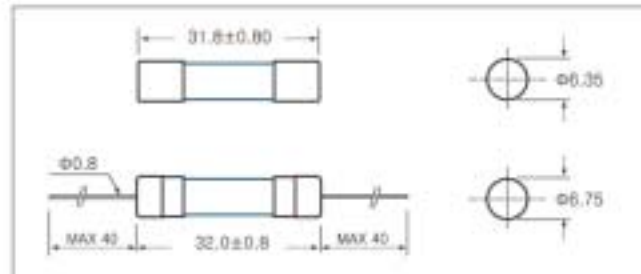
% of Ampere Rating	Opening Time
110 %	4 hours, Minimum
135 %	1 hour, Maximum
200 %	5 sec-2 minutes

UL File No.

65TS	125V 1A-15A (Listed) 16A-25A (Recognized) 250V 1A-15A (Listed)
------	---

CSA Certified file No.

65TS	125V 1A-15A (Listed) 250V 1A-15A (Listed)
------	--



Interrupting Rating

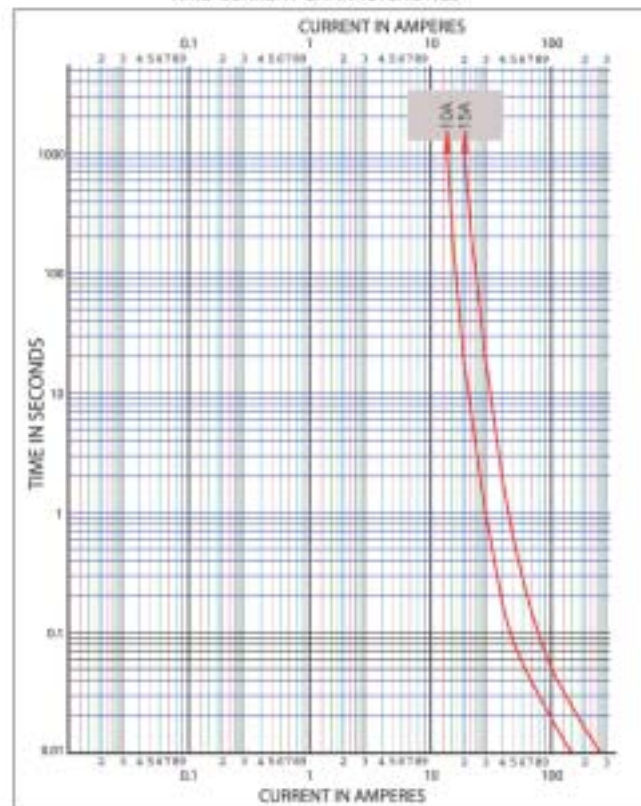
10,000 amperes at 125V AC (1A-25A)	100 amperes at 250V AC (1A-3.5A)
200 amperes at 250V AC (4A-10A)	750 amperes at 250V AC (12A-15A)

RATINGS

65TS Cat. No.	Ampere
010 H/L	1A
013 H/L	1.25A
015 H/L	1.5A
016 H/L	1.6A
020 H/L	2A
025 H/L	2.5A
030 H/L	3A
032 H/L	3.15A
035 H/L	3.5A
040 H/L	4A
050 H/L	5A
060 H/L	6A
063 H/L	6.3A
070 H/L	7A
080 H/L	8A
100 H/L	10A
120 H/L	12A
130 H/L	13A
150 H/L	15A

H denotes for 250V
L denotes for 125V

TIME-CURRENT CHARACTERISTICS



22M Fast Acting Type MICRO FUSE



TEST SPECIFICATION

% of Ampere Rating	Opening Time
100 %	4 hours, Minimum
150 %	10 min, Maximum
200 %	1min, Maximum

UL File No.

22M	125V 500mA-5A (Listed)
-----	------------------------

CSA Certified file No.

22M	125V 500mA-5A (Listed)
-----	------------------------

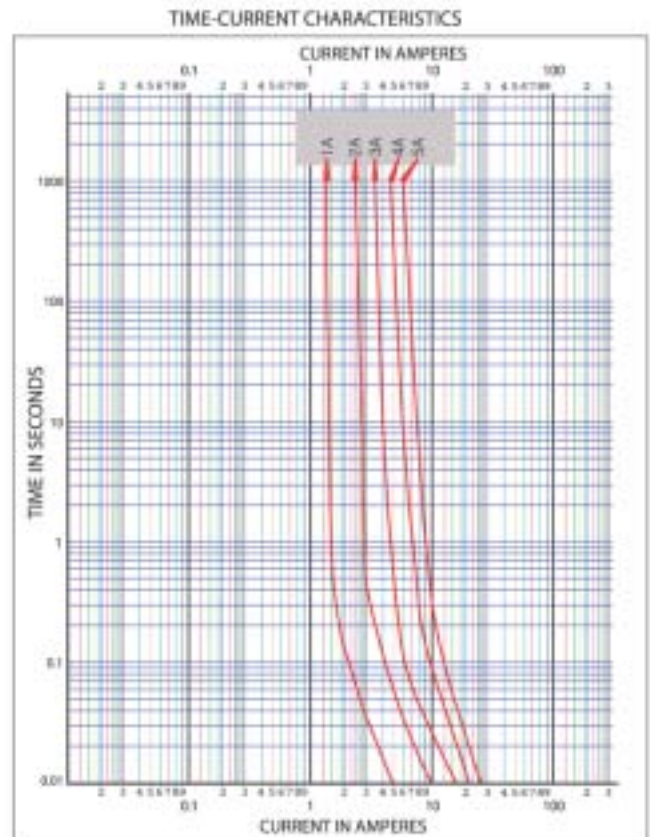
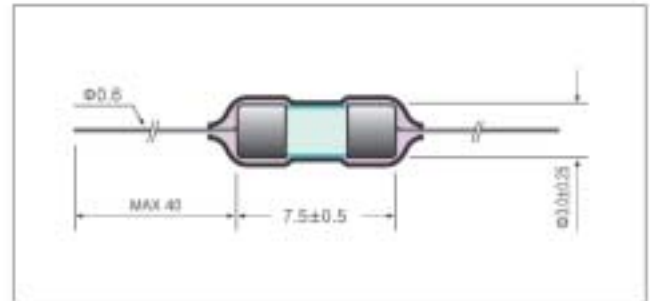
Interrupting Rating

125V 50A AC

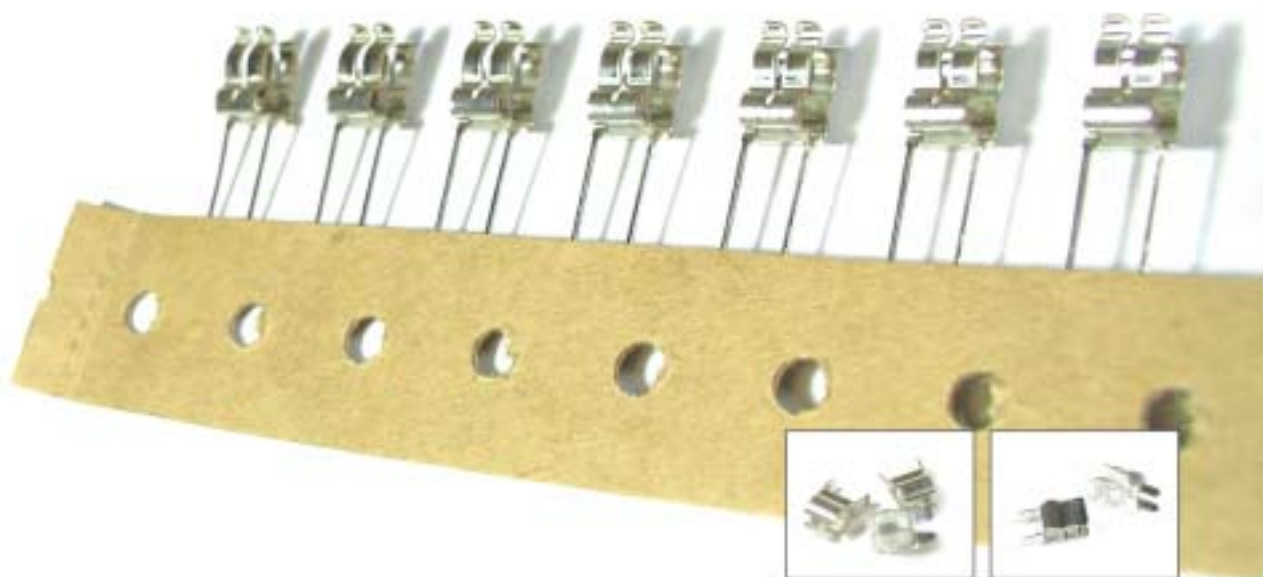
RATINGS

22M Cat. No.	Ampere
0500 L	500mA
0600 L	600mA
0630 L	630mA
0750 L	750mA
0800 L	800mA
010 L	1A
013 L	1.25A
015 L	1.5A
016 L	1.6A
020 L	2A
025 L	2.5A
030 L	3A
032 L	3.15A
035 L	3.5A
040 L	4A
050 L	5A

L denotes for 125V



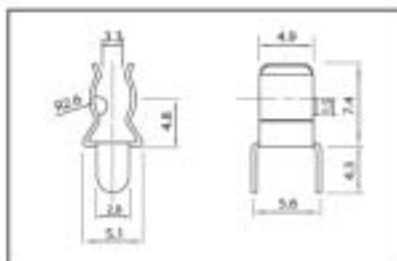
FUSE CLIPS



TYPE 51A



DIMENSION



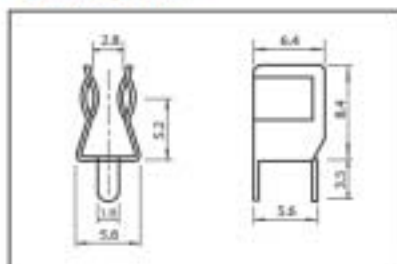
DETAILS

- ▶ Material : Phosphor Bronze Spring
- ▶ Tin or Nickel plated
- ▶ Max. Voltage drop with dummy copper bar insertion : 4mV/Amp.
- ▶ For fuses 5mm diameter
- ▶ Thickness : 0.35

TYPE 51E



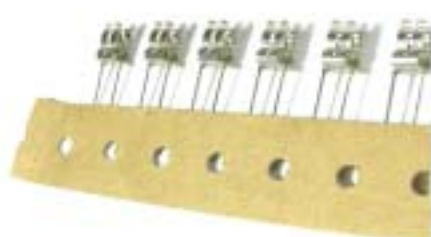
DIMENSION



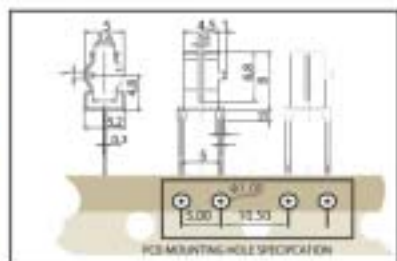
DETAILS

- ▶ Material : Phosphor Bronze Spring
- ▶ Tin or Nickel plated
- ▶ Max. Voltage drop with dummy copper bar insertion : 4mV/Amp.
- ▶ For fuses 5mm diameter
- ▶ Thickness : 0.35

TYPE 51F



DIMENSION



DETAILS

- ▶ Material : Phosphor Bronze Spring
- ▶ Tin or Nickel plated
- ▶ Max. Voltage drop with dummy copper bar insertion : 4mV/Amp.
- ▶ For fuses 5mm diameter
- ▶ Thickness : 0.30

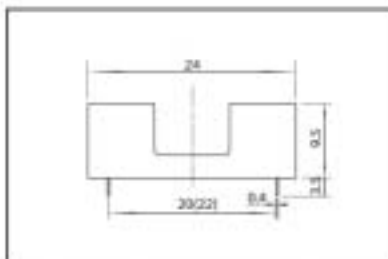
FUSE BLOCKS & HOLDERS



TYPE GF 205B

DIMENSION

DETAILS

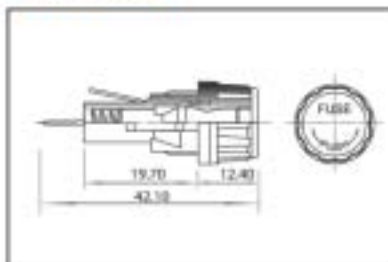


- ▶ Standard for $\Phi 5.2 \times 20.0\text{mm}$ (0.196" \times 0.787") Fuse
- ▶ Contact resistance : 5m Ω max
- ▶ Clip and terminal welded
- ▶ Quick-connect terminal
- ▶ Various terminal angle available
- ▶ Phosphor Bronze high tensile clips

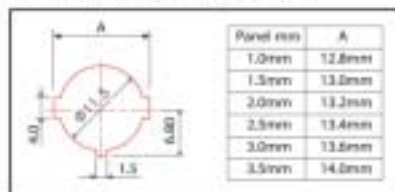
TYPE FH 02A

DIMENSION

DETAILS



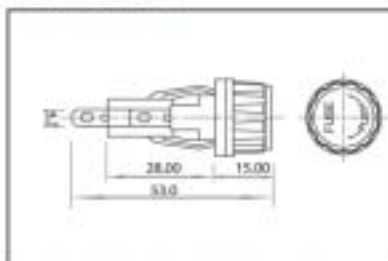
- ▶ Standard for $\Phi 5.2 \times 20.0\text{mm}$ (0.196" \times 0.787") Fuse with locking type knob
- ▶ Ratings : 250V 10A
- ▶ Puncture test : 1500V AC



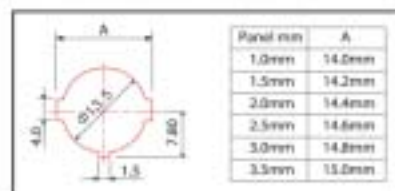
TYPE FH 01A

DIMENSION

DETAILS



- ▶ Standard for $6.35 \times 31.8\text{mm}$ ($\frac{1}{4}$ " \times $1\frac{1}{4}$ ") Fuse with locking type knob
- ▶ Ratings : 250V 10A
- ▶ Puncture test : 1500V AC





KS A 9001/ISO9001



UL File No. E236987



CSA Certified File No. 1433145



Safety Certification



VED File No. 40007771



111-5, Gongdeok 1 dong Mapo-gu

SEOUL 121-801 KOREA

Tel: 82-2-714-3641-2 FAX: 82-2-714-3630

www.dainfuse.com

 **DAINFUSE**



KS A 9001/ISO9001



UL File No. E236987



CSA Certified File No. 1433145



Safety Certification



VED File No. 40007771

