

# TRADITIONAL SEMICONDUCTOR FUSES

150/250/500/600/700 VAC • Very Fast-Acting • 1-1200 A



## Specifications

### Voltage Ratings

L15S:	150 VAC/DC (1 – 60 A) 150 VAC (70 – 1000 A) 100 VDC (70 – 1000 A)
L25S:	250 VAC/DC (1 – 200 A) 250 VAC (225 – 800 A) 200 VDC (225 – 800 A)
L50S:	500 VAC/450 VDC
L60S:	600 VAC
KLC:	600 VAC
L70S:	700 VAC/650 VDC

L25S series fuses are Littelfuse Certified for DC ratings shown in Rating Table.

### Interrupting Rating

AC:	200 kA rms (L15S series 100 kA)
DC:	20 kA

**Ampere Range** 1 – 1200 A See Rating Table for ratings available in each series.

**Approvals** UL Recognized (File: E71611)  
CSA Recognized (File: LR29862)

## Recommended Fuse Holders

1LFS101/1LFS102  
LSCR001/LSCR002

## Web Resources

For additional information, visit:  
[littelfuse.com/semi](http://littelfuse.com/semi)

## Ordering Information

AMPERE RATINGS	SERIES ORDERING NUMBER					
	L15S	L25S	L50S	L60S	KLC <sup>†</sup>	L70S
1	L15S001	L25S001	–	L60S001	KLC001	–
2	L15S002	L25S002	–	L60S002	KLC002	–
3	L15S003	L25S003	–	L60S003	KLC003	–
4	L15S004	L25S004	–	L60S004	KLC004	–
5	L15S005	L25S005	–	L60S005	KLC005	–
6	L15S006	L25S006	–	L60S006	KLC006	–
7	L15S007	–	–	–	KLC007	–
8	L15S008	L25S008	–	L60S008	KLC008	–
9	L15S009	–	–	–	–	–
10	L15S010	L25S010	L50S010	L60S010	KLC010	L70S010
12	L15S012	L25S012	L50S012	L60S012	KLC012	–
15	L15S015	L25S015	L50S015	L60S015	KLC015	L70S015
17½	–	–	–	L60S17.5	KLC17.5	–
20	L15S020	L25S020	L50S020	L60S020	KLC020	L70S020
25	L15S025	L25S025	L50S025	L60S025	KLC025	L70S025
30	L15S030	L25S030	L50S030	L60S030	KLC030	L70S030
35	L15S035	L25S035	L50S035	L60S035	KLC035	L70S035
40	L15S040	L25S040	L50S040	L60S040	KLC040	L70S040
45	L15S045	L25S045	–	L60S045	KLC045	–
50	L15S050	L25S050	L50S050	L60S050	KLC050	L70S050
60	L15S060	L25S060	L50S060	L60S060	KLC060	L70S060
70	L15S070	L25S070	L50S070	L60S070	KLC070	L70S070
80	L15S080	L25S080	L50S080	L60S080	KLC080	L70S080
90	L15S090	L25S090	L50S090	L60S090	KLC090	L70S090
100	L15S100	L25S100	L50S100	L60S100	KLC100	L70S100
110	–	–	–	–	KLC110	–
125	L15S125	L25S125	L50S125	L60S125	KLC125	L70S125
150	L15S150	L25S150	L50S150	L60S150	KLC150	L70S150
175	–	L25S175	L50S175	L60S175	KLC175	L70S175
200	L15S200	L25S200	L50S200	L60S200	KLC200	L70S200
225	–	L25S225	L50S225	L60S225	KLC225	L70S225
250	L15S250	L25S250	L50S250	L60S250	KLC250	L70S250
275	–	L25S275	L50S275	–	–	–
300	L15S300	L25S300	L50S300	L60S300	KLC300	L70S300
350	L15S350	L25S350	L50S350	L60S350	KLC350	L70S350
400	L15S400	L25S400	L50S400	L60S400	KLC400	L70S400
450	L15S450	L25S450	L50S450	L60S450	KLC450	L70S450
500	L15S500	L25S500	L50S500	L60S500	KLC500	L70S500
550	–	–	L50S550	–	–	–
600	L15S600	L25S600	L50S600	L60S600	KLC600	L70S600
700	–	L25S700	L50S700	L60S700	KLC700	L70S700
800	L15S800	L25S800	L50S800	L60S800	KLC800	L70S800
900	–	–	LA50P9004	–	–	LA70P9004
1000	L15S1000	–	LA50P10004	–	–	LA70P10004
1200	–	–	LA50P12004	–	–	LA70P12004

<sup>†</sup> KLC series fuses are recommended for replacement use only.

# TRADITIONAL SEMICONDUCTOR FUSES



## Dimensions

AMPERE RATING	FIG. NO.	DIMENSIONS INCHES (mm)							
		A	B	C	D	E	F	G	H

### L15S Series, 150 VAC

1 – 30	1	1½ (38.1)	—	¾ (9.5)	13/32 (10.3)	—	—	—	—
31 – 60	1	2 (50.8)	—	5/8 (15.9)	13/16 (20.6)	—	—	—	—
61 – 450	3	1½/32 (29.4)	1⅞ (47.6)	2¾/16 (55.6)	221/32 (67.5)	1 (25.4)	43/64 (17.1)	5/16 (7.9)	3/16 (4.8)
451 – 1000	3	1¼ (31.8)	115/16 (49.2)	29/16 (65.1)	3/2 (88.9)	1½ (38.1)	1 (25.4)	13/32 (10.3)	¼ (6.4)

### L25S Series, 250 VAC

1 – 30	1	2 (50.8)	—	½ (12.7)	9/16 (14.3)	—	—	—	—
31 – 60	2	1½ (41.3)	2¼ (57.2)	2½ (63.5)	33/16 (81.0)	13/16 (20.6)	23/32 (18.3)	11/32 (8.7)	1/8 (3.2)
61 – 200	3	1½ (41.3)	25/16 (58.7)	27/16 (61.9)	37/8 (79.4)	17/32 (31.0)	1 (25.4)	5/16 (7.9)	3/16 (4.8)
201 – 700	3	119/32 (40.5)	29/32 (57.9)	229/32 (73.8)	327/32 (97.6)	1½ (38.1)	1 (25.4)	13/32 (10.3)	¼ (6.4)
701 – 800	3	119/32 (40.5)	229/32 (57.9)	229/32 (73.8)	327/32 (97.6)	2 (50.8)	1½ (38.1)	13/32 (10.3)	¼ (6.4)

### L50S Series, 500 VAC / 450 VDC

10 – 30	1	2 (50.8)	—	½ (12.7)	9/16 (14.3)	—	—	—	—
31 – 60	2	1½ (41.3)	2¼ (57.2)	2½ (63.5)	33/16 (81.0)	13/16 (20.6)	23/32 (18.3)	11/32 (8.7)	1/8 (3.2)
61 – 100	3	21/8 (54.0)	211/16 (68.3)	3 (76.2)	35/8 (92.1)	1 (25.4)	¾ (19.1)	11/32 (8.7)	1/8 (3.2)
101 – 200	3	21/8 (54.0)	213/16 (71.4)	215/16 (74.6)	35/8 (92.1)	17/32 (31.0)	.895 (22.7)	5/16 (7.9)	3/16 (4.75)
201 – 400	3	23/32 (53.2)	225/32 (70.6)	313/32 (86.5)	411/32 (110.3)	1½ (38.1)	1 (25.4)	13/32 (10.3)	¼ (6.4)
401 – 600	3	27/32 (56.4)	229/32 (73.8)	37/32 (89.7)	415/32 (113.5)	2 (50.8)	1½ (38.1)	13/32 (10.3)	¼ (6.4)
601 – 800	3	27/32 (56.4)	49/32 (108.7)	45/8 (117.5)	615/32 (164.3)	2½ (63.5)	2 (50.8)	17/32 (13.5)	3/8 (9.5)

### L60S Series, 600 VAC

1 – 30	1	5 (127.0)	—	5/8 (15.9)	13/16 (20.6)	—	—	—	—
31 – 60	2	225/32 (70.6)	37/8 (87.3)	311/16 (93.7)	43/8 (111.1)	13/16 (20.6)	23/32 (18.3)	11/32 (8.7)	1/8 (3.2)
61 – 100	2	229/32 (73.8)	317/32 (89.7)	325/32 (96.0)	415/32 (113.5)	11/16 (27.0)	23/32 (18.3)	11/32 (8.7)	1/8 (3.2)
101 – 200	2	229/32 (73.8)	39/16 (90.5)	33/4 (95.3)	413/32 (111.9)	15/16 (33.3)	1 (25.4)	5/16 (7.9)	3/16 (4.8)
201 – 400	2	229/32 (73.8)	331/32 (100.8)	45/32 (105.6)	51/8 (130.2)	137/64 (40.1)	1 (25.4)	13/32 (10.3)	¼ (6.4)
401 – 600	2	2½ (73.0)	331/32 (100.8)	49/64 (105.2)	51/8 (130.2)	2½ (63.5)	1½ (38.1)	13/32 (10.3)	¼ (6.4)
601 – 800	2	31/32 (77.0)	55/32 (133.4)	511/32 (135.7)	7¼ (184.2)	2½ (63.5)	2 (50.8)	17/32 (13.5)	3/8 (9.5)

### L70S Series, 700 VAC / 650 VDC

10 – 30	1	2 (50.8)	—	½ (12.7)	9/16 (14.3)	—	—	—	—
31 – 60	3	21/8 (73.0)	37/16 (87.3)	325/32 (96.0)	43/8 (111.1)	1 (25.4)	43/64 (17.1)	11/32 (8.7)	1/8 (3.2)
61 – 100	3	21/8 (73.0)	39/16 (90.5)	311/16 (93.7)	43/8 (111.1)	17/32 (31.0)	29/32 (22.9)	5/16 (7.9)	3/16 (4.8)
101 – 200	3	227/32 (72.2)	317/32 (89.7)	45/32 (105.6)	53/32 (129.4)	1½ (38.1)	1 (25.4)	13/32 (10.3)	¼ (6.4)
201 – 400	3	227/32 (72.2)	317/32 (89.7)	45/32 (105.6)	53/32 (129.4)	2 (50.8)	1½ (38.1)	13/32 (10.3)	¼ (6.4)
401 – 600	3	227/32 (72.2)	429/32 (124.6)	5¼ (133.4)	73/32 (180.2)	2½ (63.5)	2 (50.8)	17/32 (13.5)	3/8 (9.5)
601 – 800	4	35/16 (84.1)	55/16 (134.9)	613/16 (173.0)	—	27/8 (73.0)	2 (50.8)	5/8 (15.9)	H: 3/8 (9.5) J: 5/16 (7.9)

### KLC Series, 600 VAC

1 – 30	2	17/8 (47.6)	2½ (63.5)	—	27/8 (73.0)	9/16 (14.3)	13/32 (10.3)	¼ (6.4)	3/64 (1.2)
31 – 60	2	23/4 (69.9)	37/8 (85.7)	35/8 (92.1)	45/16 (109.5)	13/16 (20.6)	23/32 (18.3)	11/32 (8.7)	1/8 (3.2)
61 – 100	3	21/8 (73.0)	321/32 (92.9)	41/16 (103.2)	5 (127.0)	1 (25.4)	¾ (19.1)	13/32 (10.3)	1/8 (3.2)
101 – 200	3	227/32 (72.2)	317/32 (89.7)	43/8 (111.1)	53/32 (129.4)	1½ (38.1)	1 (25.4)	13/32 (10.3)	¼ (6.4)
201 – 400	3	227/32 (72.2)	421/32 (118.3)	427/32 (123.0)	6¼ (158.8)	2 (50.8)	15/8 (41.3)	9/16 (14.3)	¼ (6.4)
401 – 800	3	227/32 (72.2)	421/32 (118.3)	511/32 (135.7)	6¼ (158.8)	2½ (63.5)	2 (50.8)	9/16 (14.3)	3/8 (9.5)

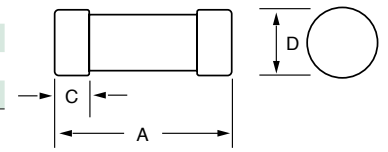


Fig. 1

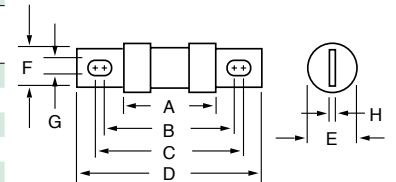


Fig. 2

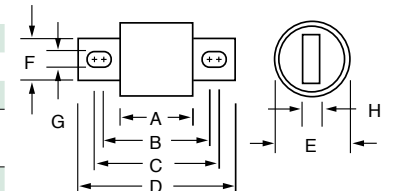


Fig. 3

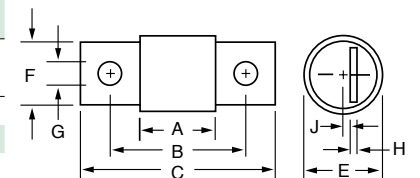


Fig. 4

# LA15QS ALTERNATE DIMENSION SEMICONDUCTOR FUSES

150 VAC • Very Fast-Acting • 1-6000 A



## LA15QS Series

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sup>2</sup> t @150 VAC (A <sup>2</sup> s x 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
1	LA15QS1-2	2	0.0002	0.68
2	LA15QS2-2	2	0.001	1.3
3	LA15QS3-2	2	0.003	1.7
4	LA15QS4-2	2	0.007	2.1
5	LA15QS5-2	2	0.012	2.8
6	LA15QS6-2	2	0.022	3.1
7	LA15QS7-2	2	0.011	2.2
8	LA15QS8-2	2	0.015	2.5
10	LA15QS10-2	2	0.019	2.6
12	LA15QS12-2	2	0.030	3
15	LA15QS15-2	2	0.042	3
20	LA15QS20-2	2	0.072	4
25	LA15QS25-2	2	0.14	5.2
30	LA15QS30-2	2	0.25	5.6
35	LA15QS35-1	1	0.21	9
40	LA15QS40-1	1	0.28	10
40	LA15QS40-4TI	4TI	0.39	3.1
45	LA15QS45-1	1	0.34	12
50	LA15QS50-1	1	0.47	13
50	LA15QS50-4	4	0.64	4
55	LA15QS55-1	1	Contact Factory	Contact Factory
60	LA15QS60-1	1	0.94	14
70	LA15QS70-4	4	2	5.6
70	LA15QS70-4TI	4TI	2	5.6
80	LA15QS80-4	4	2.5	8
80	LA15QS80-4TI	4TI	2.5	8
90	LA15QS90-4	4	3.1	9
100	LA15QS100-4	4	3.6	10
100	LA15QS100-4TI	4TI	3.6	10
130	LA15QS130-4	4	5.3	14
130	LA15QS130-4TI	4TI	5.3	14
150	LA15QS150-4	4	6.8	16
150	LA15QS150-4IL	4IL	6.8	16
150	LA15QS150-4TI	4TI	6.8	16
200	LA15QS200-4	4	9	22
200	LA15QS200-4IL	4IL	9	22

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sup>2</sup> t @150 VAC (A <sup>2</sup> s x 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
250	LA15QS250-4	4	15	22
250	LA15QS250-4TI	4TI	15	27
300	LA15QS300-4	4	22	33
300	LA15QS300-4IL	4IL	22	33
300	LA15QS300-4TL	4TI	22	33
350	LA15QS350-4	4	32	40
350	LA15QS350-4TI	4TI	32	40
400	LA15QS400-4	4	40	45
400	LA15QS400-4IL	4IL	40	45
400	LA15QS400-4TI	4TI	40	45
450	LA15QS450-4	4	50	50
450	LA15QS450-4IL	4IL	50	50
500	LA15QS500-4	4	90	30
500	LA15QS500-4IL	4IL	90	30
600	LA15QS600-4	4	130	35
600	LA15QS600-4IL	4IL	130	35
800	LA15QS800-4	4	290	57
1000	LA15QS1000-4	4	520	75
1000	LA15QS1000-4IL	4IL	520	75
1000	LA15QS1000-4TI	4TI	520	75
1000	LA15QS1000-128	128	540	88
1000	LA15QS1000-128IL	128IL	540	88
1200	LA15QS1200-128	128	680	100
1200	LA15QS1200-128IL	128IL	680	100
1500	LA15QS1500-128	128	1200	130
1500	LA15QS1500-128IL	128IL	1200	130
2000	LA15QS2000-128	128	1900	165
2000	LA15QS2000-128IL	128IL	1900	165
2500	LA15QS2500-128	128	3200	195
2500	LA15QS2500-128IL	128IL	3200	195
3000	LA15QS3000-128	128	4800	240
3000	LA15QS3000-128IL	128IL	4800	240
3500	LA15QS3500-128	128	6500	260
4000	LA15QS4000-128	128	8500	270
4000	LA15QS4000-128IL	128IL	8500	270
5000	LA15QS5000-128	128	Contact Factory	Contact Factory
6000	LA15QS6000-128	128	Contact Factory	Contact Factory

## Specifications

<b>Voltage Rating</b>	AC: 150 V DC: 150 V
<b>Interrupting Rating</b>	100 kA
<b>Ampere Range</b>	1 – 6000 A
<b>Approvals</b>	UL Recognized

## Web Resources

For additional information, visit: [littelfuse.com/la15qs](http://littelfuse.com/la15qs)

## Dimensions

AMPERE RATINGS	MOUNTING TYPE	FIGURE NO.	DIMENSIONS INCHES (mm)									TAP
			A	B	C	D	E	F	G	H		
1 – 30	2	1	1.50 (38.1)	0.41 (10.4)	–	–	–	–	–	–	–	–
35 – 60	1	1	2.00 (50.8)	0.81 (20.6)	–	–	–	–	–	–	–	–
40 – 450	4, 4TI*, 4IL*	2	2.66 (67.6)	1.00 (25.4)	1.16 (29.5)	2.19 (55.6)	1.91 (48.5)	0.31 (7.9)	0.88 (22.4)	0.19 (4.8)	–	–
500 – 1000	4, 4TI*, 4IL*	2	3.50 (88.9)	1.50 (38.1)	1.25 (31.8)	2.56 (65.0)	1.94 (49.3)	0.41 (10.4)	1.00 (25.4)	0.25 (6.4)	–	–
750 – 2000	128, 128IL*	3	1.88 (47.9)	2.00 (50.8)	1.63 (41.4)	1.75 (44.5)	1.00 (25.4)	–	–	–	–	3/8-24-1/2 deep
2500 – 3000	128, 128IL*	3	1.88 (47.9)	3.00 (76.2)	1.63 (41.4)	2.50 (63.5)	1.50 (38.1)	–	–	–	–	1/2-20-1/2 deep
3500 – 4000	128, 128IL*	4	1.88 (47.9)	3.50 (88.9)	1.63 (41.4)	3.00 (76.2)	1.06 (27.0)	1.06 (27.0)	–	–	–	1/2-20-1/2 deep
5000 – 6000	128	5	2.38 (60.5)	5.75 (146)	1.88 (47.7)	5.00 (127)	1.50 (38.1)	1.50 (38.1)	–	–	–	1/2-20-1/2 deep

\*Optional Trigger Actuator (IL). Optional Trigger Indicator (TI) see web for dimensions.

Figure 1

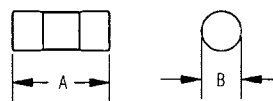


Figure 2

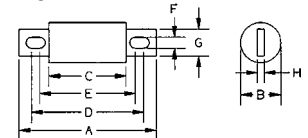


Figure 3

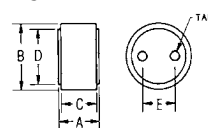


Figure 4

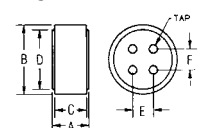
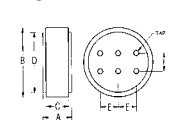


Figure 5



Dimensions for reference only.

# LA30QS ALTERNATE DIMENSION SEMICONDUCTOR FUSES

300 VAC • Very Fast-Acting • 35-4500 A



## LA30QS Series

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sup>2</sup> t @300 VAC (A <sup>2</sup> s X 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
35	LA30QS35-4	4	0.9	6.4
40	LA30QS40-4	4	1.2	7
50	LA30QS50-4	4	2	9.9
60	LA30QS60-4	4	2.7	11.6
70	LA30QS70-4	4	1.6	11
80	LA30QS80-4	4	2.6	11
90	LA30QS90-4	4	3.2	13
100	LA30QS100-4	4	4.1	13
100	LA30QS100-4TI	4TI	4.1	13
125	LA30QS125-4	4	6.3	16
130	LA30QS130-4	4	6.3	16
150	LA30QS150-4	4	9.3	19
150	LA30QS150-4TI	4TI	9.3	19
175	LA30QS175-4	4	10	27
200	LA30QS200-4	4	15	30
200	LA30QS200-4TI	4TI	15	30
225	LA30QS225-4	4	22	33
250	LA30QS250-4	4	25	41
250	LA30QS250-4TI	4TI	25	41
300	LA30QS300-4	4	37	47
300	LA30QS300-4TI	4TI	37	47
350	LA30QS350-4	4	62	49
400	LA30QS400-4	4	83	56
400	LA30QS400-4IL	4IL	83	56
400	LA30QS400-4TI	4TI	83	56
450	LA30QS450-4	4	130	53

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sup>2</sup> t @300 VAC (A <sup>2</sup> s X 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
500	LA30QS500-4	4	160	59
550	LA30QS550-4	4	190	65
600	LA30QS600-4	4	230	69
600	LA30QS600-4TI	4TI	230	69
600	LA30QS600-4IL	4IL	230	69
700	LA30QS700-4	4	260	90
700	LA30QS700-128	128	260	73
800	LA30QS800-4	4	330	108
800	LA30QS800-4IL	4IL	330	108
800	LA30QS800-128	128	330	84
1000	LA30QS1000-128	128	460	105
1000	LA30QS1000-128IL	128IL	460	105
1200	LA30QS1200-128	128	880	110
1500	LA30QS1500-128	128	1400	140
1500	LA30QS1500-128IL	128IL	1400	140
1600	LA30QS1600-128	128	1690	150
2000	LA30QS2000-128	128	2600	190
2000	LA30QS2000-128IL	128IL	2600	190
2500	LA30QS2500-128	128	4000	230
2500	LA30QS2500-128IL	128IL	4000	230
3000	LA30QS3000-128	128	4700	340
3500	LA30QS3500-128	128	6500	380
3500	LA30QS3500-128IL	128IL	6500	380
4000	LA30QS4000-128	128	8600	450
4500	LA30QS4500-128	128	11000	500

## Description

Littelfuse LA30QS series Semiconductor protection fuses are intended for the protection of Power Semiconductors such as diodes, phase control SCR's and other power semiconductor devices. The LA30QS is recommended for new applications providing solutions for your critical protection needs for 300V and less semiconductors.

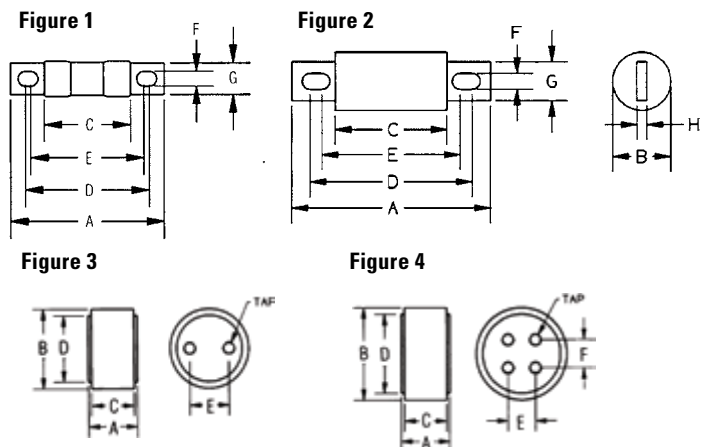
## Specifications

<b>Voltage Rating</b>	AC: 300 V DC: 300 V
<b>Interrupting Rating</b>	200 kA
<b>Ampere Range</b>	35 – 4500 A
<b>Approvals</b>	UL Recognized

## Web Resources

For additional information, visit: [littelfuse.com/la30qs](http://littelfuse.com/la30qs)

## Dimensions



Dimensions for reference only.

AMPERE RATING	MOUNTING TYPE	FIGURE NO.	DIMENSIONS INCHES (mm)								TAP
			A	B	C	D	E	F	G	H	
35 – 60	4	1	3.19 (81.0)	0.81 (20.6)	1.63 (41.4)	2.50 (63.5)	2.25 (57.5)	0.34 (8.6)	0.72 (18.3)	0.13 (3.3)	–
70 – 200	4	2	3.13 (79.5)	1.22 (31.0)	1.63 (41.4)	2.44 (62.0)	2.31 (58.7)	0.31 (7.9)	1.00 (25.4)	0.19 (4.8)	–
225 – 800	4, 4IL*	2	3.84 (97.5)	1.50 (38.1)	1.59 (40.1)	2.91 (73.9)	2.28 (57.9)	0.41 (10.4)	1.00 (25.4)	0.25 (6.4)	–
800 – 1200	128	3	2.59 (65.8)	3.00 (76.2)	2.34 (59.4)	2.50 (63.5)	1.50 (38.1)	–	–	–	3/8-24-1/2 deep
1500 – 2500	128, 128IL*	4	2.59 (65.8)	3.50 (88.9)	2.34 (59.4)	3.00 (76.2)	1.50 (38.1)	1.50 (38.1)	–	–	3/8-24-1/2 deep
3000 – 4500	128, 128IL*	4	2.59 (65.8)	4.50 (114)	2.34 (59.4)	3.75 (95.3)	1.50 (38.1)	1.50 (38.1)	–	–	1/2-20-1/2 deep

\*Optional Trigger Actuator (IL). Optional Trigger Indicator (TI) see web for dimensions.

# LA50QS ALTERNATE DIMENSION SEMICONDUCTOR FUSES

500 VAC • Very Fast-Acting • 35-1200 A



## LA50QS Series

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sup>2</sup> t @500 VAC (A <sup>2</sup> s X 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
35	LA50QS35-4	4	0.56	6
40	LA50QS40-4	4	0.69	7
50	LA50QS50-4	4	1.1	8
60	LA50QS60-4	4	1.8	10
70	LA50QS70-4	4	1.9	12
80	LA50QS80-4	4	2.6	14
90	LA50QS90-4	4	3.6	15
100	LA50QS100-4	4	4.4	17
125	LA50QS125-4	4	5.6	21
150	LA50QS150-4	4	9	25
175	LA50QS175-4	4	15	29
200	LA50QS200-4	4	20	33
225	LA50QS225-4	4	25	37
250	LA50QS250-4	4	29	41
300	LA50QS300-4	4	55	49
350	LA50QS350-4	4	88	57
400	LA50QS400-4	4	98	65
450	LA50QS450-4	4	130	69
500	LA50QS500-4	4	160	77
600	LA50QS600-4	4	220	92
700	LA50QS700-4	4	270	110
800	LA50QS800-4	4	360	130
900	LA50QS900-4	4	500	140
1000	LA50QS1000-4	4	560	160
1200	LA50QS1200-4	4	930	175

## Description

In response to new equipment requirements, Littelfuse LA50QS series fuses were developed to improve the overall performance of semiconductor fuses. The LA50QS provides the best protection features including lower I<sup>2</sup>t, longer life when subjected to cyclic loading and lower watts loss. LA50QS is today's choice for the protection of dynamic solid state equipment.

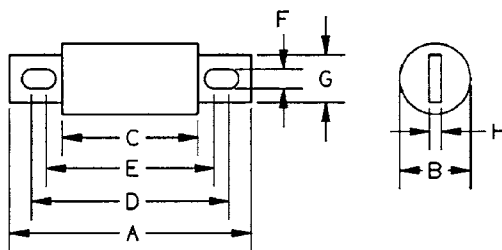
## Specifications

<b>Voltage Rating</b>	AC: 500 V
	DC: 500 V
<b>Interrupting Rating</b>	AC: 200 kA
	DC: 100 kA
<b>Ampere Range</b>	35 – 1200 A
<b>Approvals</b>	UL Recognized
	CSA Certified

## Web Resources

For additional information, visit: [littelfuse.com/la50qs](http://littelfuse.com/la50qs)

## Dimensions



Dimensions for reference only.

AMPERE RATING	MOUNTING TYPE	DIMENSIONS INCHES (mm)							
		A	B	C	D	E	F	G	H
35 – 100	4	3.63 (92.2)	1.00 (25.4)	2.13 (54.1)	2.94 (74.7)	2.75 (69.9)	0.31 (7.9)	0.75 (19.1)	0.13 (3.3)
125 – 200	4	3.63 (92.2)	1.22 (31.0)	2.13 (54.1)	2.94 (74.7)	2.81 (71.4)	0.31 (7.9)	1.00 (25.4)	0.19 (4.8)
225 – 400	4	4.34 (110)	1.50 (38.1)	2.09 (53.1)	3.41 (86.6)	2.78 (70.6)	0.41 (10.4)	1.00 (25.4)	0.25 (6.4)
450 – 600	4	4.47 (114)	2.00 (50.8)	2.22 (56.4)	3.53 (89.7)	2.91 (73.9)	0.41 (10.4)	1.50 (38.1)	0.25 (6.4)
700 – 800	4	6.47 (164.3)	2.50 (63.5)	2.22 (56.4)	5.00 (127.0)	3.44 (87.3)	0.53 (13.5)	1.50 (38.1)	0.25 (6.4)
900 – 1200	4	6.97 (177.0)	3.00 (76.2)	3.22 (81.8)	5.47 (138.9)	4.47 (113.5)	0.63 (15.9)	2.38 (60.3)	0.44 (11.1)

Contact Littelfuse for characteristic curves.

# ALTERNATE DIMENSION SEMICONDUCTOR FUSES

600 VAC/DC • Very Fast-Acting • 5-40 A



## LA60Q Series Semiconductor Fuses

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sub>t</sub> <sup>2</sup> @600 VAC (A <sup>2</sup> s)	WATTS LOSS @ RATED CURRENT (W)
5	LA60Q5-2	2	60	0.7
8	LA60Q8-2	2	70	1.1
10	LA60Q10-2	2	110	1.6
12	LA60Q12-2	2	150	2
15	LA60Q15-2	2	180	3
20	LA60Q20-2	2	330	4.4
25	LA60Q25-2	2	440	5.5
30	LA60Q30-2	2	860	5.6
35	LA60Q35-2	2	1300	6.4
40	LA60Q40-2	2	1800	7

### Specifications

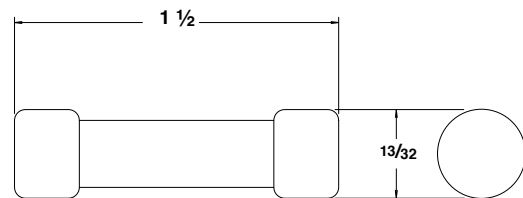
<b>Voltage Rating</b>	AC: 600 V DC: 600 V
<b>Interrupting Rating</b>	AC: 200 kA DC: 100 kA
<b>Ampere Range</b>	5 – 40 A
<b>Approvals</b>	UL Recognized

Contact Littelfuse for characteristic curves.

### Description

Littelfuse LA60Q semiconductor protection fuses feature a 600 volt AC/DC rating in a compact size (1 1/2" x 13/32"). LA60Q also has the lowest I<sub>t</sub><sup>2</sup> of all similar fuses and excellent cycling ability. Applications include inverters and small equipment requiring extremely fast response to faults, without the need to carry sustained heavy overloads.

### Dimensions Inches



### Web Resources

For additional information, visit: [littelfuse.com/la60q](http://littelfuse.com/la60q)

690 VAC/700 VDC • Very Fast-Acting • 10-100 A



## LA70QSF Series French Cylindrical Fuses

AMPERE RATING	CATALOG NUMBER (NO STRIKER)	CATALOG NUMBER (WITH STRIKER)	BODY SIZE	MAXIMUM CLEARING I <sub>t</sub> <sup>2</sup> @700 VAC (A <sup>2</sup> s X 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
10	LA70QS10-14F	LA70QS10-14FI	14 x 51	0.04	3.5
12	LA70QS12-14F	LA70QS12-14FI	14 x 51	0.06	4.4
16	LA70QS16-14F	LA70QS16-14FI	14 x 51	0.10	4.8
20	LA70QS20-14F	LA70QS20-14FI	14 x 51	0.16	5.2
25	LA70QS25-14F	LA70QS25-14FI	14 x 51	0.27	5.8
32	LA70QS32-14F	LA70QS32-14FI	14 x 51	1.50	7.0
40	LA70QS40-14F	LA70QS40-14FI	14 x 51	0.70	10.7
50	LA70QS50-14F	LA70QS50-14FI	14 x 51	1.50	11.6
20	LA70QS20-22F	LA70QS20-22FI	22 x 58	0.076	8.0
25	LA70QS25-22F	LA70QS25-22FI	22 x 58	0.125	10.0
32	LA70QS32-22F	LA70QS32-22FI	22 x 58	0.27	11.0
40	LA70QS40-22F	LA70QS40-22FI	22 x 58	0.48	13.0
50	LA70QS50-22F	LA70QS50-22FI	22 x 58	0.80	14.9
63	LA70QS63-22F	LA70QS63-22FI	22 x 58	1.85	16.0
80	LA70QS80-22F	LA70QS80-22FI	22 x 58	3.80	17.8
100	LA70QS100-22F	LA70QS100-22FI	22 x 58	8.00	19.0

### Description

Littelfuse French Cylindrical style semiconductor fuses are an extension to the LA70QS series. They offer a solid-fill design with high interrupting ratings and an optional striker for visual or remote blown fuse indication.

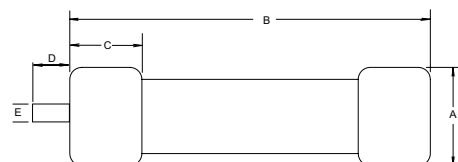
### Specifications

<b>Voltage Rating</b>	AC: 690 V DC: 700 V
<b>Interrupting Rating</b>	AC: 200 kA DC: 100 kA
<b>Ampere Range</b>	10 – 100 A
<b>Approvals</b>	UL Recognized CSA Certified

### Web Resources

For additional information, visit: [www.littelfuse.com/semi](http://www.littelfuse.com/semi)

### Dimensions



FUSE SIZE	DIMENSIONS mm				
	A	B	C	D	E
14x51	14	51	14	–	–
22x58	22	58	16	–	–
14x51 Striker	14	51	14	7.5	3.8
22x58 Striker	22	58	16	7.5	3.8

### Recommended Fuse Holders

CYH series for non-striker fuses LA70QS(amp)22F  
CYH1451 series for LA70QS(amp)14F



# LA70QS ALTERNATE DIMENSION SEMICONDUCTOR FUSES

700 VAC/VDC • Very Fast-Acting • 35-800 A



## LA70QS Series Semiconductor Fuses

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sup>2</sup> t @700 VAC (A <sup>2</sup> s X 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
35	LA70QS35-4	4	0.47	6.2
40	LA70QS40-4	4	0.58	7.5
50	LA70QS50-4	4	0.88	9.8
60	LA70QS60-4	4	1.2	12
70	LA70QS70-4	4	1.8	15
80	LA70QS80-4	4	2.3	16
90	LA70QS90-4	4	3	20
100	LA70QS100-4	4	3.6	24
125	LA70QS125-4	4	6.9	22
125	LA70QS125-4K	4K	6.9	22
150	LA70QS150-4	4	11	28
150	LA70QS150-4K	4K	11	29
175	LA70QS175-4	4	14	35
175	LA70QS175-4K	4K	14	35
200	LA70QS200-4	4	19	41
200	LA70QS200-4K	4	19	41
250	LA70QS250-4	4	42	42
300	LA70QS300-4	4	55	53
350	LA70QS350-4	4	72	64
400	LA70QS400-4	4	99	75
450	LA70QS450-4	4	125	75
450	LA70QS450-4K	4K	125	75
500	LA70QS500-4	4	150	92
500	LA70QS500-4K	4K	160	92
600	LA70QS600-4	4	222	116
600	LA70QS600-4K	4K	222	116
700	LA70QS700-4	4	332	125
800	LA70QS800-4	4	433	143

## Description

Littelfuse LA70QS semiconductor fuses were developed to provide improved performance required by today's new equipment. The LA70QS features lower I<sup>2</sup>t, improved cycling, and lower watts loss. It is the best choice for the protection of dynamic solid-state equipment.

## Features/Benefits

- I<sup>2</sup>t improved protection of equipment.
- Superior cycling ability for long, reliable life on high cycling loading.
- Lower watts loss for cooler operation.
- 700 Volt AC/DC rating provides greater design versatility
- Compact sizes allow downsizing of equipment

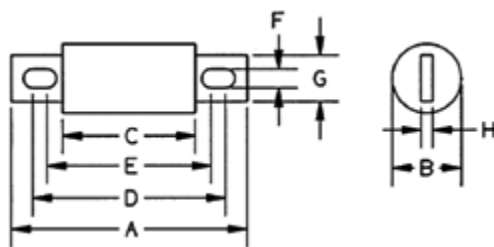
## Specifications

<b>Voltage Rating</b>	AC: 700 V DC: 700 V
<b>Interrupting Rating</b>	AC: 200 kA DC: 100 kA
<b>Ampere Range</b>	35 – 800 A
<b>Approvals</b>	UL Recognized CSA Certified

## Web Resources

For additional information, visit: [littelfuse.com/la70qs](http://littelfuse.com/la70qs)

## Dimensions



Dimensions for reference only.

AMPERES	MOUNTING TYPE	DIMENSIONS INCHES (mm)							
		A	B	C	D	E	F	G	H
35 – 100	4	4.38 (111)	1.00 (25.4)	2.88 (73)	3.69 (93.6)	3.50 (88.9)	0.31 (7.9)	0.75 (19.0)	0.13 (3.2)
125 – 200	4	4.38 (111)	1.22 (31.0)	2.88 (73)	3.69 (93.6)	3.56 (90.5)	0.31 (7.9)	1.00 (25.4)	0.19 (4.8)
125 – 200	4K	5.09 (129)	1.22 (31.0)	2.88 (73)	4.19 (106)	3.50 (88)	0.41 (10.3)	1.00 (25.4)	0.19 (4.8)
225 – 400	4	5.09 (129)	1.50 (38.1)	2.84 (72.2)	4.16 (106)	3.53 (89.7)	0.40 (10.3)	1.50 (38.1)	0.25 (6.4)
450 – 600	4	5.09 (129)	2.00 (50.8)	2.84 (72.2)	4.16 (106)	3.53 (89.7)	0.41 (10.3)	1.50 (38.1)	0.25 (6.4)
450 – 600	4K	7.09 (180)	2.00 (50.8)	2.84 (72.2)	6.16 (156)	3.53 (89.7)	0.53 (13.5)	1.50 (38.1)	0.25 (6.4)
700 – 800	4	7.09 (180)	2.50 (63.5)	2.84 (72.2)	5.28 (134)	4.91 (125)	0.53 (13.5)	2.00 (50.8)	0.38 (9.5)

Contact Littelfuse for characteristic curves.

# LA100P ALTERNATE DIMENSION SEMICONDUCTOR FUSES

1000 VAC • Very Fast-Acting • 15-1000 A



## LA100P Series Semiconductor Fuses

AMPERE RATING	CATALOG NUMBER	MOUNTING TYPE	MAXIMUM CLEARING I <sup>2</sup> t @1000 VAC (A <sup>2</sup> s X 10 <sup>3</sup> )	WATTS LOSS @ RATED CURRENT (W)
15	LA100P15-1	1	0.6	3.4
20	LA100P20-1	1	0.8	5.9
25	LA100P25-1	1	1.3	9
30	LA100P30-1	1	1.5	12.8
35	LA100P35-4	4	2.2	7.3
40	LA100P40-4	4	2.9	8.3
50	LA100P50-4	4	4.5	11
60	LA100P60-4	4	6.5	13
80	LA100P80-4	4	12	14
100	LA100P100-4	4	18	18
125	LA100P125-4	4	28	23
150	LA100P150-4	4	41	28
200	LA100P200-4	4	72	36
225	LA100P225-4	4	91	40
250	LA100P250-4	4	110	46
300	LA100P300-4	4	160	55
350	LA100P350-4	4	220	65
400	LA100P400-4	4	290	70
500	LA100P500-4	4	450	90
600	LA100P600-4	4	650	110
650	LA100P650-4	4	780	120
700	LA100P700-4	4	880	125
800	LA100P800-4	4	1200	140
1000	LA100P1000-4	4	1900	190

## Description

Littelfuse LA100P semiconductor protection fuses are rated 1000 V, extending the range of protection for UPS systems, AC and DC drives, reduced voltage motor starters and similar applications where lower I<sup>2</sup>t and superior reliability are needed. With ratings from 15-1000 amperes, a wide range of high voltage applications can be served.

## Features/Benefits

- Low I<sup>2</sup>t minimizes damage to protected components on short-circuit.
- Controlled arc voltage reduces stress to circuit components during fuse clearing.

## Specifications

<b>Voltage Rating</b>	AC: 1000 V DC: 750 V
<b>Interrupting Rating</b>	100 kA
<b>Ampere Range</b>	15 – 1000 A
<b>Approvals</b>	UL Recognized

## Web Resources

For additional information, visit: [littelfuse.com/la100p](http://littelfuse.com/la100p)

## Dimensions

Figure 1

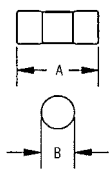


Figure 2

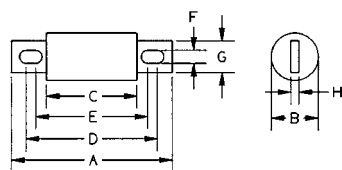


Figure 3

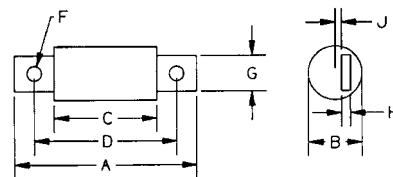
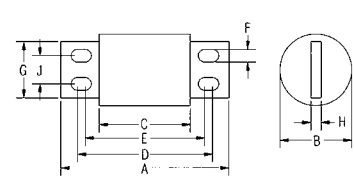


Figure 4



Dimensions for reference only.

AMPERES	MOUNTING TYPE	FIGURE NO.	DIMENSIONS INCHES (mm)								
			A	B	C	D	E	F	G	H	J
15 – 30	1	1	2.53 (66.8)	0.56 (14.2)	–	–	–	–	–	–	–
35 – 60	4	2	5.00 (127)	1.00 (25.4)	3.50 (88.9)	4.31 (109)	4.19 (106)	0.31 (7.9)	0.75 (19.1)	0.13 (3.3)	–
65 – 100	4	2	5.00 (127)	1.22 (31)	3.50 (88.9)	4.31 (109)	4.19 (106)	0.31 (7.9)	1.00 (25.4)	0.19 (4.8)	–
125 – 200	4	2	5.72 (145)	1.50 (38.1)	3.47 (88.1)	4.78 (121)	4.16 (106)	0.41 (10.4)	1.00 (25.4)	0.25 (6.4)	–
225 – 400	4	2	5.72 (145)	2.00 (50.8)	3.47 (88.1)	4.78 (121)	4.16 (106)	0.41 (10.4)	1.50 (25.4)	0.25 (6.4)	–
500 – 600	4	2	7.72 (196)	2.50 (63.5)	3.47 (88.1)	5.88 (149)	5.56 (147)	0.53 (13.5)	2.00 (50.8)	0.38 (9.7)	–
650 – 800	4	3	7.44 (189)	2.88 (73.2)	3.94 (100)	5.94 (151)	–	0.63 (16)	2.00 (50.8)	0.38 (9.7)	0.31 (7.9)
1000	4	4	8.22 (209)	3.50 (88.9)	4.47 (114)	6.59 (167)	5.84 (148)	0.63 (16)	2.75 (69.9)	0.50 (12.7)	1.38 (35.1)

Optional Trigger Indicator (TI) for 50 A - 1000 A available  
Contact Littelfuse for characteristic curves.