



Expertise Applied | Answers Delivered



# HIGH-SPEED SEMICONDUCTOR FUSES CATALOG

**POWR-SPEED® PRODUCTS**

**HIGH-SPEED FUSES**

**FUSE BLOCKS & HOLDERS**

**MICROSWITCHES**

**FAST-ACTING FUSES**

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# **NEW PSR Series High-Speed Square-Body Fuses**

*Now available in case sizes 70 and 73*



*Plus, expanded ratings for case sizes 71 and 72*

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# TABLE OF CONTENTS

## INTRODUCTION

POWR-SPEED® High-Speed Semiconductor Fuses ..... 2



## POWR-SPEED® PRODUCTS

### High-Speed Square-Body Fuses

PSR Series ..... 4

### High-Speed Round-Body Fuses

L700S Series ..... 8  
 L500S Series ..... 11  
 L70S Series ..... 14  
 L50S Series ..... 16  
 L15S / L25S / L60S / KLC Series ..... 18

## POWR-SPEED® ACCESSORIES



LSCR Series High-Speed Fuse Blocks ..... 20  
 MS Series High-Speed Microswitches ..... 23

## FAST-ACTING PRODUCTS



### UL Class L

LDC Series POWR-PRO® Fuses ..... 25

### UL Class J

JLS Series Fuses ..... 26

### UL Class T

JLLN / JLLS Series Fuses ..... 27

### UL Class CC / Midget

KLKR / KLKD Series Fuses ..... 28

### Telecommunications

L17T / TLS Series Telecom Power Fuses ..... 29

## UL ACCESSORIES



Class J Blocks ..... 30  
 Class T Blocks ..... 31  
 Class CC / Midget Holders ..... 32

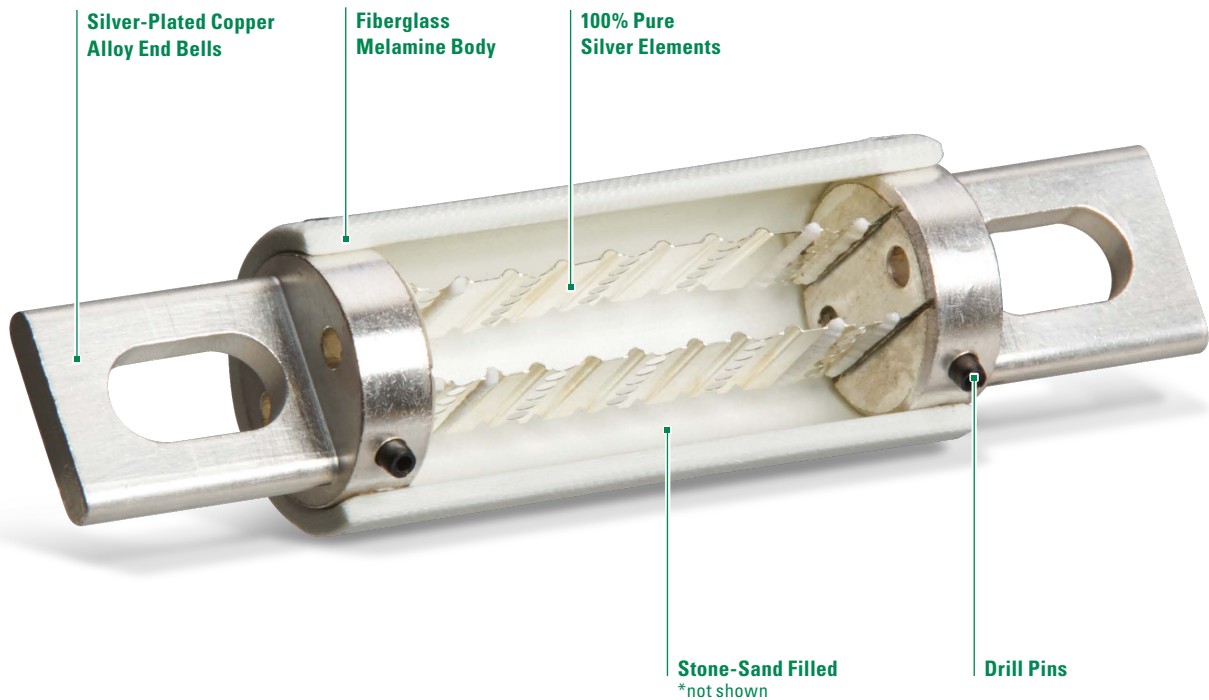
## CROSS REFERENCE GUIDE

POWR-SPEED® Fuse Cross Reference ..... 33

# Introducing

# **POWR-SPEED<sup>®</sup>**

# High-Speed

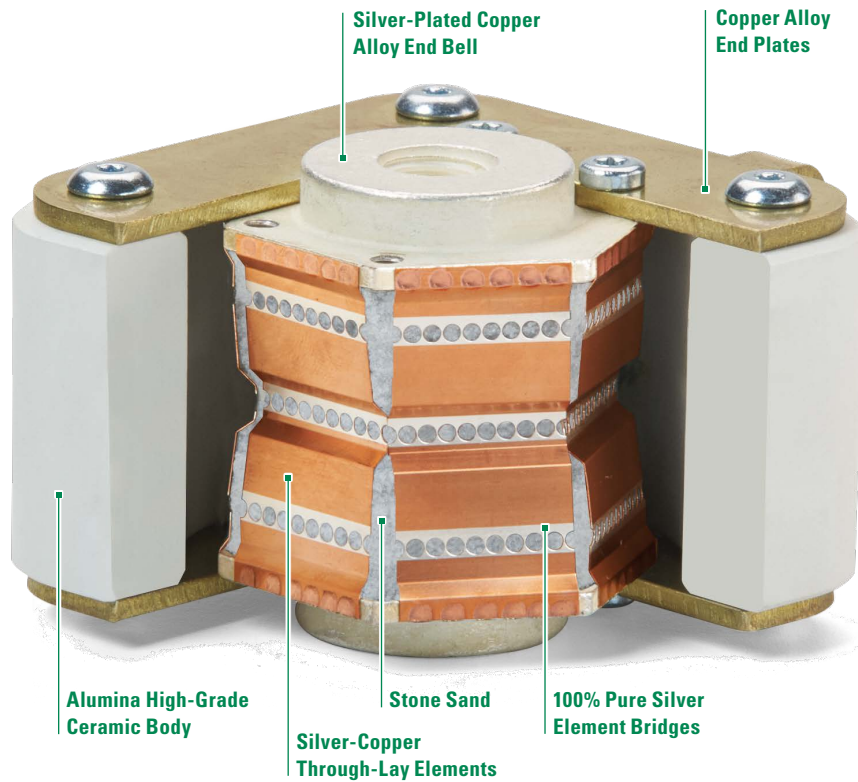


## OPTIMIZED FOR PERFORMANCE AND EFFICIENCY

These certified high-speed fuses are optimized for performance and efficiency to better protect your critical power semiconductors against short circuits. How is *POWR-SPEED* better? Backed by over 40 years of experience, Littelfuse engineered the *POWR-Speed* line to help you protect critical power electronics from overcurrents that may cause damage to your equipment. High-speed fuses are reliable, very fast-acting products that can reduce the amount of short circuit current and improve the life of your power semiconductor devices.

The *POWR-SPEED* High-Speed Fuses are easy to retrofit as drop-in replacements where similar products are currently being used. Custom designs are available if you need a specific fuse for your application. Call us. Our engineers are eager to partner with you before, during, and long after the design process to meet your specific needs.

# Semiconductor Fuses



Features	Benefits
Extremely Current Limiting	Reduces peak let-through current and let-through energy (I <sup>2</sup> t) to protect semiconductor components and devices
Low Watt Loss	Saves energy wasted during operation
*Resilient Labeling	Laser etched resistance values eliminate labels that erode over time
**All Ratings Published on Label	Eliminates confusion when replacing and inspecting
Universal Mounting	Quick and easy field replacement
Optimized Design	Better energy efficiency and improved protection levels
**Flush End Terminals	Flexibility to mount directly to bus-bar
RoHS and REACH Compliant	Environment friendly, offering greater acceptance in global power electronics
Optimized Performance	Balanced speed of operation, energy efficiency, and longevity
**Silicone Sealant	Prevents sand leakage and improves reliability
**High DC Interrupting Rating	Achieves an interrupting rating of 150kA for applications that require more power

\*Round-body style only  
 \*\*Square-body style only



# PSR SERIES HIGH-SPEED SQUARE BODY FUSES

Semiconductor Fuses • Flush End • 40 A - 2000 A



## Description

Littelfuse PSR Series High-Speed Square Body Fuses are specially designed for protection of power semiconductor devices such as diodes, triacs, IGBTs, SCRs, MOSFETs and other solid state devices that are typically designed into power conversion and power conditioning equipment. Variable frequency drives, inverters, UPS, rectifiers and soft-starters are examples of typical equipment designed with sensitive power semiconductor devices that cannot withstand any line surge or overcurrent conditions and require high-speed protection.

Littelfuse POWR-SPEED® PSR Series products offer optimized circuit protection at the extremely fast speed required to protect modern day power conversion devices. Such products are commonly found in numerous applications including pulp and paper industries, cranes and heavy-lifting equipment, processing industries, wastewater treatment plants and various large factories and MRO facilities.

## Features/Benefits

- Best in Class DC performance
- Extremely current limiting
- Superior cycling capability
- Global certification cURus, CCC, IEC
- Direct bus-bar mount design
- Visual and optional microswitch fuse blown indication
- Low watt-loss design
- Compliance with US and Canadian requirements
- Class aR performance according to IEC60269-4

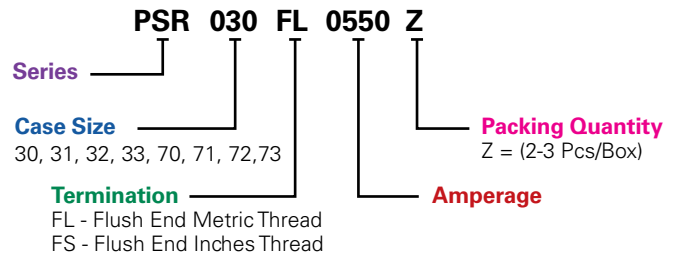
## Applications

- Power Conversion Devices (UPS, Inverter, Rectifiers, Drives)
- DC Systems (DC Common Bus, DC Injection Braking)
- Battery Protection Application (Energy Storage Systems)
- Electric Vehicle Charging Stations
- Heaters and Power Supplies

## Specifications

<b>Voltage Range</b>	AC: 550 V - 1300 V DC: 500 V - 1000 V
<b>Amperage Range</b>	40 A - 2000 A
<b>Interrupting Range</b>	AC: 100 kA - 200 kA DC: 150 kA
<b>Time Constant</b>	10ms
<b>Microswitch</b>	Yes
<b>Mounting</b>	Flush-End Style
<b>Material</b>	Body: Ceramic Contacts: Plated Brass
<b>Approvals</b>	UL 248-13 Recognized (File: E71611) C-UR-US (File: E71611) IEC 60269-4 (Class aR) CCC
<b>Environmental</b>	RoHS Compliant, REACH
<b>Operating Temperature</b>	-55 C° to +125 C°
<b>Storage Temperature</b>	Up to +35 C° with Relative Humidity <65%
<b>Country of Origin</b>	Mexico

## Ordering Part Number



## Catalog Number

SERIES	CASE SIZE	TERMINATION	AMPERAGE	CATALOG NUMBER	ORDERING PART NUMBER
PSR	030	FL	0550	PSR030FL0550	PSR030FL0550Z

## Recommended Accessories

**Microswitch:** MS3H1000C (Case Size 30 to 33)  
MS7H1500C (Case Size 70 to 73)

# PSR SERIES HIGH-SPEED SQUARE BODY FUSES

## Electrical Characteristics

CASE SIZE*	CATALOG NUMBER		AMPERAGE RATING (A)	VOLTAGE RATING (V)			INTERRUPTING RATING		MELTING (PRE-ARC) I <sup>2</sup> T (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> T (A <sup>2</sup> s) AT RATED VOLTAGE		WATT LOSS AT 100% RATED CURRENT (W)	AGENCY CERTIFICATION	
	FLUSH END METRIC THREAD	FLUSH END INCHES THREAD		AC		DC	AC	DC		AC	DC		cURus	CCC
				IEC	UL									
30	PSR030FL0040	PSR030FS0040	40	690	700	600	200kA	150kA	76	280	260	12	•	•
	PSR030FL0050	PSR030FS0050	50	690	700	600	200kA	150kA	110	598	384	15	•	•
	PSR030FL0063	PSR030FS0063	63	690	700	600	200kA	150kA	176	1023	640	20	•	•
	PSR030FL0080	PSR030FS0080	80	690	700	600	200kA	150kA	304	1728	1252	24	•	•
	PSR030FL0100	PSR030FS0100	100	690	700	600	200kA	150kA	437	2835	1575	27	•	•
	PSR030FL0125	PSR030FS0125	125	690	700	600	200kA	150kA	707	4684	2783	36	•	•
	PSR030FL0160	PSR030FS0160	160	690	700	600	200kA	150kA	1359	9114	5507	39	•	•
	PSR030FL0200	PSR030FS0200	200	690	700	600	200kA	150kA	3012	15169	14700	39	•	•
	PSR030FL0250	PSR030FS0250	250	690	700	600	200kA	150kA	4668	29952	20833	50	•	•
	PSR030FL0315	PSR030FS0315	315	690	700	600	200kA	150kA	7131	61830	31600	61	•	•
	PSR030FL0350	PSR030FS0350	350	690	700	600	200kA	150kA	12007	85320	49273	62	•	•
	PSR030FL0400	PSR030FS0400	400	690	700	600	200kA	150kA	16209	114750	63367	75	•	•
	PSR030FL0450	PSR030FS0450	450	690	700	600	200kA	150kA	23133	160110	93533	75	•	•
PSR030FL0500	PSR030FS0500	500	690	700	600	200kA	150kA	31429	225180	137333	80	•	•	
PSR030FL0550	PSR030FS0550	550	690	700	600	200kA	150kA	44323	268920	145400	78	•	•	
31	PSR031FL0200	PSR031FS0200	200	690	700	600	200kA	150kA	1965	17334	16188	49	•	•
	PSR031FL0250	PSR031FS0250	250	690	700	600	200kA	150kA	3789	35343	21080	52	•	•
	PSR031FL0315	PSR031FS0315	315	690	700	600	200kA	150kA	6862	59130	30694	61	•	•
	PSR031FL0350	PSR031FS0350	350	690	700	600	200kA	150kA	9523	76140	40996	63	•	•
	PSR031FL0400	PSR031FS0400	400	690	700	600	200kA	150kA	14770	124335	64359	63	•	•
	PSR031FL0450	PSR031FS0450	450	690	700	600	200kA	150kA	22457	178200	97444	68	•	•
	PSR031FL0500	PSR031FS0500	500	690	700	600	200kA	150kA	29751	251505	125935	74	•	•
	PSR031FL0550	PSR031FS0550	550	690	700	600	200kA	150kA	42056	289170	171845	79	•	•
	PSR031FL0630	PSR031FS0630	630	690	700	600	200kA	150kA	73513	507465	276315	86	•	•
	PSR031FL0700	PSR031FS0700	700	690	700	600	200kA	150kA	98187	601425	337260	89	•	•
PSR031FL0800	PSR031FS0800	800	690	700	600	200kA	150kA	137208	848880	502800	107	•	•	
32	PSR032FL0400	PSR032FS0400	400	690	700	600	200kA	150kA	11104	79650	44533	82	•	•
	PSR032FL0450	PSR032FS0450	450	690	700	600	200kA	150kA	15535	116100	65463	88	•	•
	PSR032FL0500	PSR032FS0500	500	690	700	600	200kA	150kA	21573	161460	88277	94	•	•
	PSR032FL0550	PSR032FS0550	550	690	700	600	200kA	150kA	26327	177660	107960	104	•	•
	PSR032FL0630	PSR032FS0630	630	690	700	600	200kA	150kA	34790	234900	156963	110	•	•
	PSR032FL0700	PSR032FS0700	700	690	700	600	200kA	150kA	51191	291870	209287	117	•	•
	PSR032FL0800	PSR032FS0800	800	690	700	600	200kA	150kA	60125	472770	249000	145	•	•
	PSR032FL0900	PSR032FS0900	900	690	700	600	200kA	150kA	107785	764100	404000	145	•	•
	PSR032FL1000	PSR032FS1000	1000	690	700	600	200kA	150kA	190102	933120	672333	146	•	•
PSR032FL1100	PSR032FS1100	1100	690	700	600	200kA	150kA	225379	1247400	744000	149	•	•	
33	PSR033FL0450	PSR033FS0450	450	690	700	600	200kA	150kA	13600	106380	58947	99	•	•
	PSR033FL0500	PSR033FS0500	500	690	700	600	200kA	150kA	16434	140400	77846	107	•	•
	PSR033FL0550	PSR033FS0550	550	690	700	600	200kA	150kA	23314	187650	100461	108	•	•
	PSR033FL0630	PSR033FS0630	630	690	700	600	200kA	150kA	38727	285930	142437	113	•	•
	PSR033FL0700	PSR033FS0700	700	690	700	600	200kA	150kA	56763	392580	209863	113	•	•
	PSR033FL0800	PSR033FS0800	800	690	700	600	200kA	150kA	84691	575505	348500	120	•	•
	PSR033FL0900	PSR033FS0900	900	690	700	600	200kA	150kA	122619	740340	451177	122	•	•
	PSR033FL1000	PSR033FS1000	1000	690	700	600	200kA	150kA	222350	1170450	787750	124	•	•
	PSR033FL1100	PSR033FS1100	1100	690	700	600	200kA	150kA	310824	1568700	821400	127	•	•
	PSR033FL1250	PSR033FS1250	1250	690	700	600	200kA	150kA	476902	2403000	1674333	131	•	•
	PSR033FL1400	PSR033FS1400	1400	690	700	500	200kA	150kA	583552	2920050	1979750	144	•	•
	PSR033FL1500	PSR033FS1500	1500	600	650	500	200kA	150kA	674538	2433200	1996733	163	•	•
	PSR033FL1600	PSR033FS1600	1600	600	650	500	200kA	150kA	779948	2942800	2301633	182	•	•
PSR033FL1800	PSR033FS1800	1800	600	650	500	200kA	150kA	952196	3785040	2724180	224	•	•	
PSR033FL2000	PSR033FS2000	2000	550	600	500	200kA	150kA	1234315	4131600	3755180	222	•	•	

# PSR SERIES HIGH-SPEED SQUARE BODY FUSES

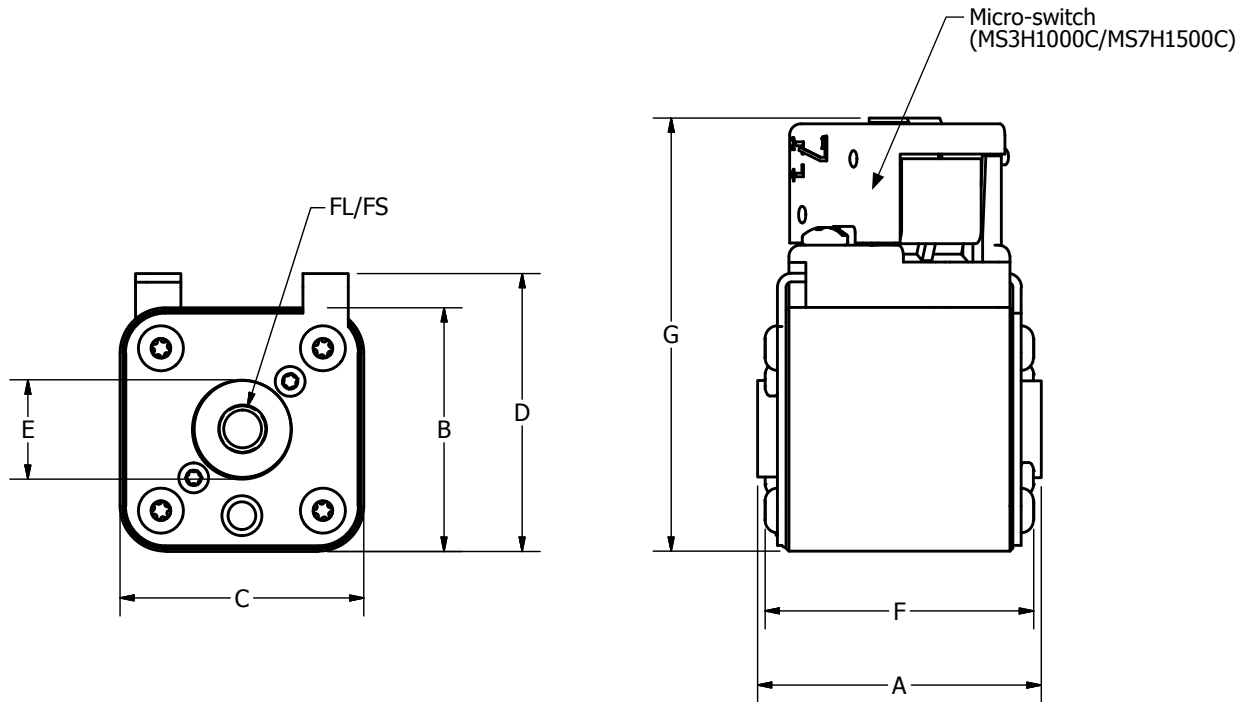
## Electrical Characteristics (cont.)

CASE SIZE*	CATALOG NUMBER		AMPERAGE RATING (A)	VOLTAGE RATING (V)			INTERRUPTING RATING		MELTING (PRE-ARC) I <sup>2</sup> T (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> T (A <sup>2</sup> s) AT RATED VOLTAGE		WATT LOSS AT 100% RATED CURRENT (W)	AGENCY CERTIFICATION	
	FLUSH END METRIC THREAD	FLUSH END INCHES THREAD		AC		DC	AC	DC		AC	DC		cURus	CCC
				IEC	UL									
						AC	DC							
70	PSR070FL0050	PSR070FS0050	50	1250	1300	1000	100kA	150kA	177	2050	400	21	•	•
	PSR070FL0063	PSR070FS0063	63	1250	1300	1000	100kA	150kA	273	3399	900	23	•	•
	PSR070FL0080	PSR070FS0080	80	1250	1300	1000	100kA	150kA	583	6732	2200	24	•	•
	PSR070FL0100	PSR070FS0100	100	1250	1300	1000	100kA	150kA	974	10996	3750	29	•	•
	PSR070FL0125	PSR070FS0125	125	1250	1300	1000	100kA	150kA	1352	13011	5150	43	•	•
	PSR070FL0160	PSR070FS0160	160	1250	1300	1000	100kA	150kA	2377	25662	8950	51	•	•
	PSR070FL0200	PSR070FS0200	200	1250	1300	1000	100kA	150kA	4177	39087	17267	61	•	•
	PSR070FL0250	PSR070FS0250	250	1250	1300	1000	100kA	150kA	8629	89790	36750	71	•	•
	PSR070FL0280	PSR070FS0280	280	1250	1300	1000	100kA	150kA	11844	113201	46750	71	•	•
PSR070FL0315	PSR070FS0315	315	1250	1300	1000	100kA	150kA	18162	142051	66833	69	•	•	
71	PSR071FL0160	PSR071FS0160	160	1250	1300	1000	100kA	150kA	2756	24600	8800	42	•	•
	PSR071FL0200	PSR071FS0200	200	1250	1300	1000	100kA	150kA	4918	50307	19050	52	•	•
	PSR071FL0250	PSR071FS0250	250	1250	1300	1000	100kA	150kA	10592	104427	43100	54	•	•
	PSR071FL0280	PSR071FS0280	280	1250	1300	1000	100kA	150kA	13763	131897	54150	58	•	•
	PSR071FL0315	PSR071FS0315	315	1250	1300	1000	100kA	150kA	20882	200244	67450	60	•	•
	PSR071FL0350	PSR071FS0350	350	1250	1300	1000	100kA	150kA	23301	225500	102500	71	•	•
	PSR071FL0400	PSR071FS0400	400	1250	1300	1000	100kA	150kA	43211	374986	185000	69	•	•
	PSR071FL0450	PSR071FS0450	450	1250	1300	1000	100kA	150kA	55915	452394	241333	88	•	•
72	PSR072FL0250	PSR072FS0250	250	1250	1300	1000	100kA	150kA	7737	72789	28567	63	•	•
	PSR072FL0280	PSR072FS0280	280	1250	1300	1000	100kA	150kA	10915	124538	46897	62	•	•
	PSR072FL0315	PSR072FS0315	315	1250	1300	1000	100kA	150kA	16187	145140	58867	67	•	•
	PSR072FL0350	PSR072FS0350	350	1250	1300	1000	100kA	150kA	18727	160447	69633	80	•	•
	PSR072FL0400	PSR072FS0400	400	1250	1300	1000	100kA	150kA	27112	243540	108000	89	•	•
	PSR072FL0450	PSR072FS0450	450	1250	1300	1000	100kA	150kA	35927	406413	159133	107	•	•
	PSR072FL0500	PSR072FS0500	500	1250	1300	1000	100kA	150kA	50398	425375	216333	115	•	•
	PSR072FL0550	PSR072FS0550	550	1250	1300	1000	100kA	150kA	73858	539833	271333	115	•	•
	PSR072FL0630	PSR072FS0630	630	1250	1300	1000	100kA	150kA	126126	942180	436000	119	•	•
73	PSR073FL0315	PSR073FS0315	315	1250	1300	1000	100kA	150kA	10245	106600	38650	88	•	•
	PSR073FL0350	PSR073FS0350	350	1250	1300	1000	100kA	150kA	13586	159627	57467	96	•	•
	PSR073FL0400	PSR073FS0400	400	1250	1300	1000	100kA	150kA	19797	211273	86800	124	•	•
	PSR073FL0450	PSR073FS0450	450	1250	1300	1000	100kA	150kA	29834	279073	114333	122	•	•
	PSR073FL0500	PSR073FS0500	500	1250	1300	1000	100kA	150kA	42751	416437	184500	121	•	•
	PSR073FL0550	PSR073FS0550	550	1250	1300	1000	100kA	150kA	55513	491713	224500	130	•	•
	PSR073FL0630	PSR073FS0630	630	1250	1300	1000	100kA	150kA	94649	804338	377500	136	•	•
	PSR073FL0700	PSR073FS0700	700	1250	1300	1000	100kA	150kA	158097	1170960	575667	135	•	•



# PSR SERIES HIGH-SPEED SQUARE BODY FUSES

## Dimensions



DIMENSIONS IN MM (IN)									
CASE SIZE	A	B	C	D	E	F	G	FL METRIC THREAD	FS INCHES THREAD
30	50.0 (1.97)	43.0 (1.69)	43.0 (1.69)	49.0 (1.93)	17.0 (0.67)	47.4 (1.86)	76.4 (3.01)	M8 x 1.25	5/16"-18 UNC 2B
31	50.0 (1.97)	51.5 (2.03)	51.5 (2.03)	57.5 (2.26)	20.0 (0.8)	48.2 (1.90)	84.9 (3.34)	M8 x 1.25	5/16"-18 UNC 2B
32	51.0 (2.01)	60.0 (2.36)	60.0 (2.36)	66.0 (2.60)	23.0 (0.91)	48.8 (1.92)	93.4 (3.68)	M10 x 1.5	3/8"-16 UNC 2B
33	51.0 (2.01)	73.5 (2.89)	73.5 (2.89)	79.5 (3.13)	30.0 (1.18)	49.2 (1.94)	106.9 (4.21)	M12 x 1.75	1/2"-13 UNC 2B
70	74.0 (2.91)	43.0 (1.69)	43.0 (1.69)	49.0 (1.93)	17.0 (0.67)	71.4 (2.81)	76.4 (3.01)	M8 x 1.25	5/16"-18 UNC 2B
71	74.0 (2.91)	51.5 (2.03)	51.5 (2.03)	57.5 (2.26)	20.0 (0.79)	72.2 (2.84)	84.9 (3.34)	M8 x 1.25	5/16"-18 UNC 2B
72	75.0 (2.95)	60.0 (2.36)	60.0 (2.36)	66.0 (2.60)	23.0 (0.91)	72.8 (2.87)	93.4 (3.68)	M10 x 1.5	3/8"-16 UNC 2B
73	75.0 (2.95)	73.5 (2.89)	73.5 (2.89)	79.5 (3.13)	30.0 (1.18)	73.2 (2.88)	106.9 (4.21)	M12 x 1.75	1/2"-13 UNC 2B

# L70QS SERIES HIGH-SPEED ROUND-BODY FUSES

700 VAC/DC • 35-800 A • Traditional Round-Body Bolted Style



## Description

The L70QS Series is a next generation High-Speed Fuse for the protection of power semiconductor devices and is designed in the Traditional North American Bolted Style package.

L70QS Series High-Speed Fuses are extremely current limiting and are used to protect power converters, drives and control circuit applications. Designed with lower I<sup>2</sup>t performance characteristics, these fuses provide balanced performance to extend longevity while lowering potentially damaging heat energy to the devices being protected.

In addition L70QS Series fuses have been designed with a universal mounting option to meet customer requirements for installation into a variety of application configurations

Littelfuse POWR-SPEED® products offer optimized circuit protection at the extremely fast speed required to protect modern day, sensitive, high-power semiconductor devices. Such products are commonly found in various industries including pulp and paper industries, cranes and heavy-lifting equipment, processing industries, wastewater treatment plants and large factories and MRO facilities.

## Features/Benefits

- Compliance with US and Canadian Requirements
- Traditional North American Bolted Style dimensions
- Class aR performance
- Direct bus-bar mount or stud mount design
- RoHS and REACH Compliant

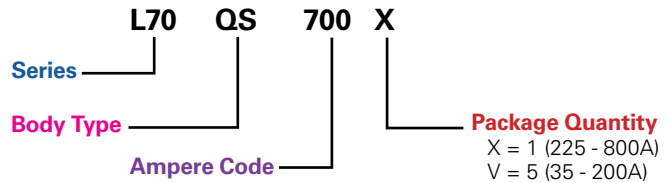
## Applications

- Power Converters (Inverters, Rectifiers)
- Power Supplies
- UPS
- Variable Speed Drives
- Control Circuits
- Soft Starters

## Specifications

<b>Voltage Rating</b>	AC: 700V DC: 700V
<b>Amperage Rating</b>	35 - 800
<b>Interrupting Rating</b>	AC: 200 kA DC: 50 kA
<b>Material</b>	Body: Melamine Caps: Copper Alloy (Silver Plated)
<b>Approvals</b>	UL Recognized (E71611) cURus (E71611)
<b>Environmental</b>	RoHS Compliant, REACH
<b>Country of Origin</b>	Mexico
<b>Operating Temperature</b>	-55C to +125C
<b>Storage Temperature</b>	Up to 35C with Relative Humidity <65%

## Part Numbering System



SERIES	BODY TYPE	AMPERE CODE	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
L70	QS	700	1	L70QS700	L70QS700.X

## Recommended Fuse Blocks

- LSCR001 (35-100A)
- LSCR002 (125-800A)



## Web Resources

Download technical documents: [littelfuse.com/L70QS](http://littelfuse.com/L70QS)

# L70QS SERIES HIGH-SPEED ROUND-BODY FUSES

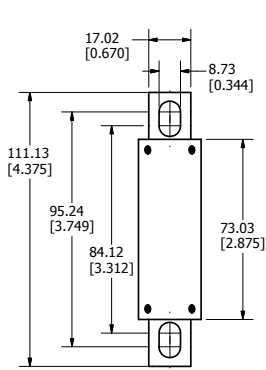
## Electrical Specifications

CATALOG NUMBER	AMPERE RATING	VOLTAGE RATING		INTERRUPT RATING		MELTING (PRE-ARC) I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)		WATTS LOSS AT 80% RATED CURRENT (W)	WATTS LOSS AT 100% RATED CURRENT (W)
		AC	DC	AC	DC		TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)			
							200 kA @ 700 VAC	50 kA @ 700 VDC		
L70QS035	35	700	700	200kA	50kA	129	332	308	5	8
L70QS040	40	700	700	200kA	50kA	153	599	416	6	9
L70QS050	50	700	700	200kA	50kA	196	711	588	6	12
L70QS060	60	700	700	200kA	50kA	269	1,233	678	9	15
L70QS070	70	700	700	200kA	50kA	359	1,575	1,075	10	20
L70QS080	80	700	700	200kA	50kA	452	2,755	1,415	12	22
L70QS090	90	700	700	200kA	50kA	625	3,365	1,920	13	25
L70QS100	100	700	700	200kA	50kA	966	3,747	2,347	15	30
L70QS125	125	700	700	200kA	50kA	2,208	8,795	5,570	13	24
L70QS150	150	700	700	200kA	50kA	3,026	13,650	8,195	17	32
L70QS175	175	700	700	200kA	50kA	4,219	19,550	11,650	20	38
L70QS200	200	700	700	200kA	50kA	5,529	22,067	16,100	22	42
L70QS225	225	700	700	200kA	50kA	9,226	34,900	25,400	22	40
L70QS250	250	700	700	200kA	50kA	10,999	43,750	31,650	27	46
L70QS300	300	700	700	200kA	50kA	16,296	64,400	45,500	31	57
L70QS350	350	700	700	200kA	50kA	24,778	91,500	65,250	35	67
L70QS400	400	700	700	200kA	50kA	34,225	110,667	94,666	41	79
L70QS450	450	700	700	200kA	50kA	38,946	145,500	113,500	45	81
L70QS500	500	700	700	200kA	50kA	42,747	173,000	125,500	56	112
L70QS600	600	700	700	200kA	50kA	67,363	220,333	179,667	67	138
L70QS700	700	700	700	200kA	50kA	99,387	368,000	298,000	72	138
L70QS800	800	700	700	200kA	50kA	156,137	466,333	415,333	76	142

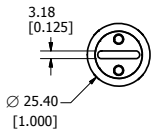
# L70QS SERIES HIGH-SPEED ROUND-BODY FUSES

## Dimensions Millimeters [inches]

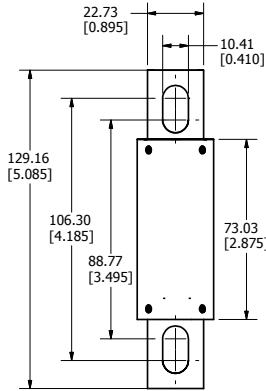
Document Number: OL-L70QS000



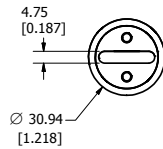
**35-100A**



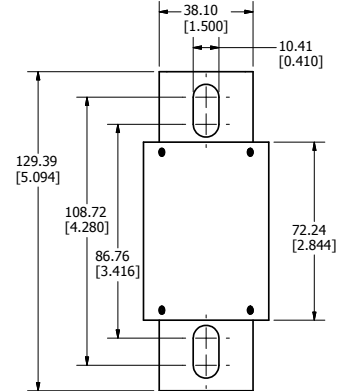
**Stud Size:** M8 (<sup>5</sup>/<sub>16</sub>"")  
**Recommended Torque:** 15 Nm (132.76 in-lb)



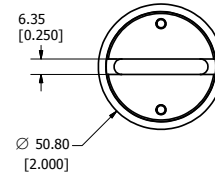
**125-200A**



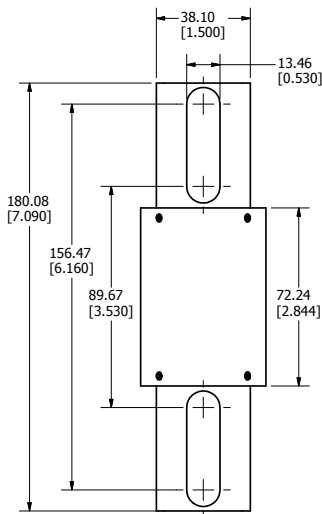
**Stud Size:** M8 (<sup>5</sup>/<sub>16</sub>"")  
**Recommended Torque:** 15 Nm (132.76 in-lb)



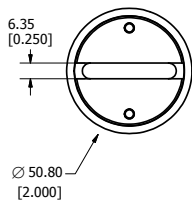
**225-400A**



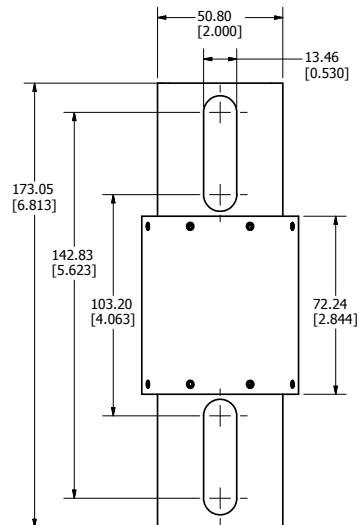
**Stud Size:** M8 (<sup>5</sup>/<sub>16</sub>"")  
**Recommended Torque:** 15 Nm (132.76 in-lb)



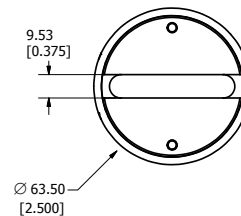
**450-600A**



**Stud Size:** M12 (<sup>1</sup>/<sub>2</sub>"")  
**Recommended Torque:** 54 Nm (477.94 in-lb)



**700-800A**



**Stud Size:** M12 (<sup>1</sup>/<sub>2</sub>"")  
**Recommended Torque:** 54 Nm (477.94 in-lb)

# L50QS SERIES HIGH-SPEED ROUND-BODY FUSES

500 VAC/DC • 35-800 A • Traditional Round-Body Bolted Style



## Description

The L50QS Series is a next generation High-Speed Fuse for the protection of power semiconductor devices and is designed in the Traditional North American Bolted Style package.

L50QS Series High-Speed Fuses are extremely current limiting and are used to protect power converters, drives and control circuit applications. Designed with lower I<sup>2</sup>t performance characteristics, these fuses provide balanced performance to extend longevity while lowering potentially damaging heat energy to the devices being protected.

In addition L50QS Series fuses have been designed with a universal mounting option to meet customer requirements for installation into a variety of application configurations

Littelfuse POWR-SPEED® products offer optimized circuit protection at the extremely fast speed required to protect modern day, sensitive, high-power semiconductor devices. Such products are commonly found in various industries including pulp and paper industries, cranes and heavy-lifting equipment, processing industries, wastewater treatment plants and large factories and MRO facilities.

## Features/Benefits

- Compliance with US and Canadian Requirements
- Traditional North American Bolted Style dimensions
- Class aR performance
- Direct bus-bar mount or stud mount design
- RoHS and REACH Compliant

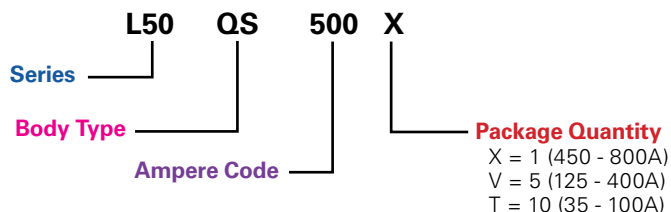
## Applications

- Power Converters (Inverters, Rectifiers)
- Power Supplies
- UPS
- Variable Speed Drives
- Control Circuits
- Soft Starters

## Specifications

<b>Voltage Rating</b>	AC: 500V DC: 500V
<b>Amperage Rating</b>	35 - 800
<b>Interrupting Rating</b>	AC: 200 kA DC: 50 kA
<b>Material</b>	Body: Melamine Caps: Copper Alloy (Silver Plated)
<b>Approvals</b>	UL Recognized (E71611) cURus (E71611)
<b>Environmental</b>	RoHS Compliant, REACH
<b>Country of Origin</b>	Mexico
<b>Operating Temperature</b>	-55C to +125C
<b>Storage Temperature</b>	Up to 35C with Relative Humidity <65%

## Part Numbering System



SERIES	BODY TYPE	AMPERE CODE	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
L50	QS	500	1	L50QS500	L50QS500.X

## Recommended Fuse Blocks

- LSCR001 (35-200 A)
- LSCR002 (225-800 A)



## Web Resources

Download technical documents: [littelfuse.com/L50QS](http://littelfuse.com/L50QS)



# L50QS SERIES HIGH-SPEED ROUND-BODY FUSES

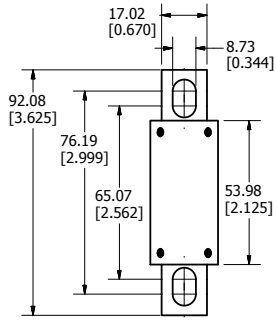
## Electrical Specifications

CATALOG NUMBER	AMPERAGE RATING	VOLTAGE RATING		INTERRUPT RATING		MELTING (PRE-ARC) I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	WATTS LOSS AT 80% RATED CURRENT	WATTS LOSS AT 100% RATED CURRENT
		AC	DC	AC	DC		200 kA @ 500 Vac	50 kA @ 500 Vdc	(W)	(W)
L50QS035	35	500	500	200kA	50kA	111	430	290	3	5
L50QS040	40	500	500	200kA	50kA	137	530	363	3	9
L50QS050	50	500	500	200kA	50kA	211	770	516	5	8
L50QS060	60	500	500	200kA	50kA	269	1,500	881	5	9
L50QS070	70	500	500	200kA	50kA	393	1,775	1,185	6	11
L50QS080	80	500	500	200kA	50kA	616	3,550	1,720	6	11
L50QS090	90	500	500	200kA	50kA	720	4,075	1,990	8	14
L50QS100	100	500	500	200kA	50kA	905	4,577	2,313	9	17
L50QS125	125	500	500	200kA	50kA	1,503	7,655	4,815	10	17
L50QS150	150	500	500	200kA	50kA	2,382	11,100	7,190	12	21
L50QS175	175	500	500	200kA	50kA	3,148	16,500	9,900	14	25
L50QS200	200	500	500	200kA	50kA	4,102	18,233	11,567	17	32
L50QS225	225	500	500	200kA	50kA	5,379	25,300	16,700	19	35
L50QS250	250	500	500	200kA	50kA	7,094	31,350	22,500	20	37
L50QS300	300	500	500	200kA	50kA	11,240	53,800	36,150	25	46
L50QS350	350	500	500	200kA	50kA	14,246	68,850	44,800	30	61
L50QS400	400	500	500	200kA	50kA	21,155	100,300	67,300	33	65
L50QS450	450	500	500	200kA	50kA	26,425	121,000	84,650	35	63
L50QS500	500	500	500	200kA	50kA	31,747	141,000	103,500	39	72
L50QS600	600	500	500	200kA	50kA	43,922	193,500	128,000	49	92
L50QS700	700	500	500	200kA	50kA	75,597	314,000	230,000	51	92
L50QS800	800	500	500	200kA	50kA	92,717	393,500	280,000	63	117

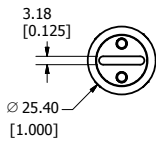
# L50QS SERIES HIGH-SPEED ROUND-BODY FUSES

## Dimensions Millimeters [inches]

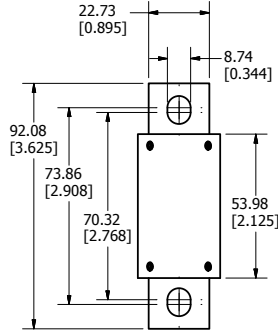
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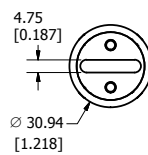
**35-100A**



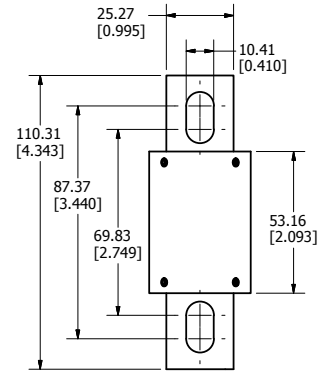
**Stud Size:** M8 ( $\frac{5}{16}$ "")  
**Recommended Torque:** 15 Nm (132.76 in-lb)



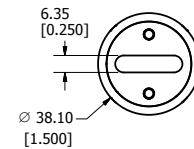
**125-200A**



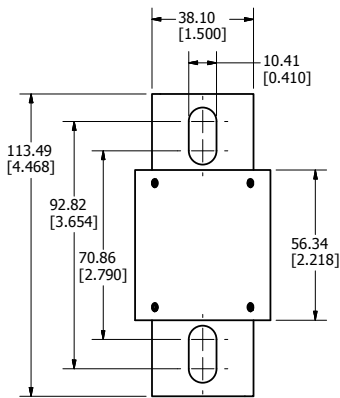
**Stud Size:** M8 ( $\frac{5}{16}$ "")  
**Recommended Torque:** 15 Nm (132.76 in-lb)



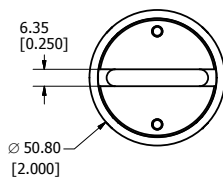
**225-400A**



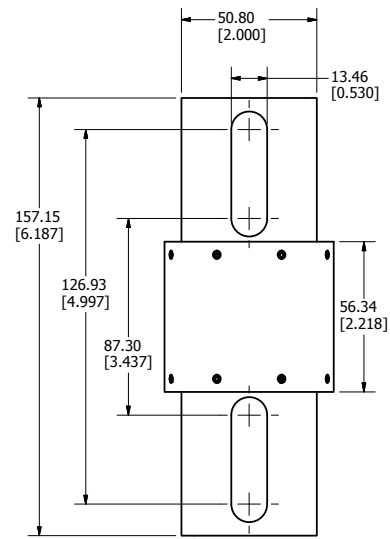
**Stud Size:** M8 ( $\frac{5}{16}$ "")  
**Recommended Torque:** 15 Nm (132.76 in-lb)



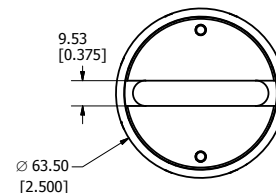
**450-600A**



**Stud Size:** M8 ( $\frac{5}{16}$ "")  
**Recommended Torque:** 15 Nm (132.76 in-lb)



**700-800A**



**Stud Size:** M12 ( $\frac{1}{2}$ "")  
**Recommended Torque:** 54 Nm (477.94 in-lb)

# L70S SERIES HIGH-SPEED FUSE

700 VAC • 650 VDC • 10-800 A • Traditional Round-Body Style



## Specifications

<b>Voltage Rating</b>	700 Vac 650 Vdc
<b>Amperage Rating</b>	10, 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500, 600, 700, 800
<b>Interrupting Rating</b>	AC: 200 kAIC DC: 20 kAIC
<b>Material</b>	Body: Melamine Terminals: Copper (silver plated)
<b>Mounting Type</b>	Cylindrical (10 - 30 A) Bolted Tags (35 - 800 A)
<b>Operating Temperature</b>	-55° C to +125° C
<b>Storage Temperature</b>	Up to 35° C with relative humidity less than 65%
<b>Approvals</b>	UL Recognized (File: E71611) CSA Recognized (File: LR29862)
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	Mexico

## Description

Littelfuse L70S Series High-Speed Fuses are designed to protect today's equipment and systems, and are manufactured with Littelfuse-developed technology that sets standards for accuracy, consistent quality, reliability, and predictable performance.

Littelfuse engineers have redefined High-Speed Fuse technology by using advanced metallurgical, polymer, and materials research, mathematical modeling, and computerized statistical analysis.

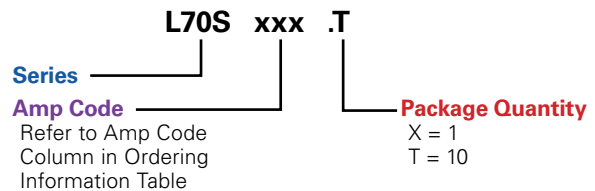
## Features/Benefits

- Extremely Current Limiting
- Low Watt Losses
- Controlled Transient Over-voltages
- UL Recognized

## Applications

- AC & DC Drives
- DC Common Bus Protection
- Power Converters
- UPS
- Soft-Starters

## Part Numbering System



SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
L70S	10	L70S010	L70S010.T
L70S	500	L70S500	L70S500.X

## Recommended Fuse Block

LSCR001 (35–100 A)  
LSCR002 (125–800 A)

## Web Resources

Download technical documents: [littelfuse.com/L70S](http://littelfuse.com/L70S)

# L70S SERIES HIGH-SPEED FUSE

## Electrical Specifications

CATALOG NUMBER	AMPERE RATING	VOLTAGE RATING		INTERRUPT RATING		MELTING (PRE-ARC) I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	WATTS LOSS AT 100% RATED CURRENT (W)	WATTS LOSS AT 80% RATED CURRENT (W)
		AC	DC	AC	DC		100 kA @ 700 Vac	200 kA @ 700 Vac	20 kA @ 650 Vdc		
							100 kA @ 700 Vac	200 kA @ 700 Vac	20 kA @ 650 Vdc		
L70S010	10	700	650	200kA	20kA	21	160	173	346	2	1
L70S015	15	700	650	200kA	20kA	34	330	355	270	2	2
L70S020	20	700	650	200kA	20kA	48	550	599	300	5	2
L70S025	25	700	650	200kA	20kA	62	810	900	340	7	4
L70S030	30	700	650	200kA	20kA	77	1,130	1,220	417	10	5
L70S035	35	700	650	200kA	20kA	110	1,470	1,500	500	12	6
L70S040	40	700	650	200kA	20kA	150	1,830	2,000	660	13	7
L70S050	50	700	650	200kA	20kA	250	2,670	3,200	1,070	16	9
L70S060	60	700	650	200kA	20kA	380	3,646	4,674	1,572	18	9
L70S070	70	700	650	200kA	20kA	545	4,800	6,000	1,970	16	9
L70S080	80	700	650	200kA	20kA	745	6,180	7,550	2,380	21	11
L70S090	90	700	650	200kA	20kA	990	7,650	9,250	2,830	25	13
L70S100	100	700	650	200kA	20kA	1,266	9,407	11,117	3,266	29	14
L70S125	125	700	650	200kA	20kA	2,150	14,700	17,550	4,900	33	17
L70S150	150	700	650	200kA	20kA	3,280	21,250	25,700	6,800	51	24
L70S175	175	700	650	200kA	20kA	4,700	28,750	34,800	9,000	63	28
L70S200	200	700	650	200kA	20kA	6,411	37,300	45,583	11,447	75	33
L70S225	225	700	650	200kA	20kA	8,000	46,500	57,000	16,000	43	24
L70S250	250	700	650	200kA	20kA	9,900	58,000	69,500	22,000	49	27
L70S300	300	700	650	200kA	20kA	14,000	83,000	97,700	37,500	60	33
L70S350	350	700	650	200kA	20kA	19,000	113,000	131,000	59,000	71	36
L70S400	400	700	650	200kA	20kA	24,373	147,290	169,000	87,875	107	49
L70S450	450	700	650	200kA	20kA	33,000	191,000	219,000	119,000	85	47
L70S500	500	700	650	200kA	20kA	44,200	240,000	275,000	155,000	92	49
L70S600	600	700	650	200kA	20kA	72,000	370,250	405,000	246,182	106	56
L70S700	700	700	650	200kA	20kA	110,000	526,000	573,000	255,000	128	67
L70S800	800	700	650	200kA	20kA	157,082	735,330	762,333	262,949	156	78

## Dimensions

AMPERE RATING	FIGURE NO.	DIMENSIONS INCHES (MM)									
		A	B	C	D	E	F	G	H	J	
10 – 30	1	2 (50.8)	—	½ (12.7)	¼ (6.3)	—	—	—	—	—	
31 – 60	2	2 7/8 (73.0)	3 1/16 (87.3)	3 3/4 (95.2)	4 3/8 (111.1)	1 (25.4)	4 3/64 (17.1)	1 1/32 (8.7)	1/8 (3.2)	—	
61 – 100	2	2 7/8 (73.0)	3 9/16 (90.5)	3 11/16 (93.7)	4 3/8 (111.1)	1 1/32 (31.0)	2 9/32 (22.9)	5/16 (7.9)	3/16 (4.8)	—	
101 – 200	2	2 27/32 (72.2)	3 17/32 (89.7)	4 5/32 (105.6)	5 3/32 (129.4)	1 1/2 (38.1)	1 (25.4)	1 3/32 (10.3)	1/4 (6.4)	—	
201 – 400	2	2 27/32 (72.2)	3 17/32 (89.7)	4 5/32 (105.6)	5 3/32 (129.4)	2 (50.8)	1 1/2 (38.1)	1 3/32 (10.3)	1/4 (6.4)	—	
401 – 600	2	2 27/32 (72.2)	4 29/32 (124.6)	5 1/4 (133.4)	7 3/32 (180.2)	2 1/2 (63.5)	2 (50.8)	1 7/32 (13.5)	3/8 (9.5)	—	
601 – 800	3	3 5/16 (84.1)	5 5/16 (134.9)	6 13/16 (173.0)	—	2 7/8 (73.0)	2 (50.8)	5/8 (15.9)	3/8 (9.5)	5/16 (7.9)	

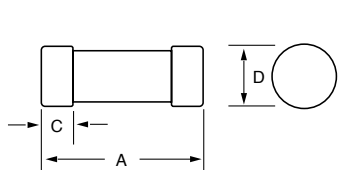


Figure 1

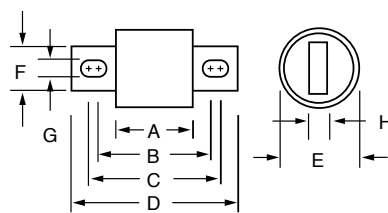


Figure 2

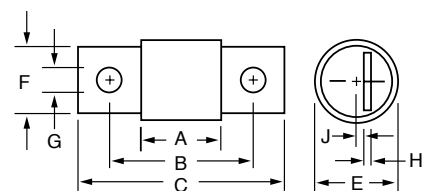


Figure 3

# L50S SERIES HIGH-SPEED FUSE

500 VAC • 450 VDC • 10-800 A • Traditional Round-Body Style



## Description

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## Features/Benefits

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- Low Watt Losses
- Controlled Transient Over-voltages
- UL Recognized

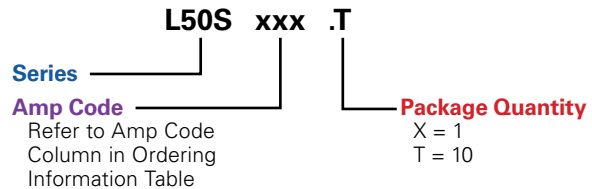
## Applications

- AC & DC Drives
- DC Common Bus Protection
- Power Converters
- UPS
- Soft-Starters

## Specifications

<b>Voltage Rating</b>	500 Vac 450 Vdc
<b>Amperage Rating</b>	10, 12, 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100, 125, 150, 175, 200, 225, 250, 275, 300, 350, 400, 450, 500, 550, 600, 700, 800
<b>Interrupting Rating</b>	AC: 200 kAIC DC: 20 kAIC
<b>Material</b>	Body: Melamine Terminals: Copper (silver plated)
<b>Mounting Type</b>	Cylindrical (10 - 30 A) Bolted Tags (35 - 800 A)
<b>Operating Temperature</b>	-55° C to +125° C
<b>Storage Temperature</b>	Up to 35° C with relative humidity less than 65%
<b>Approvals</b>	UL Recognized (File: E71611) CSA Recognized (File: LR29862)
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	Mexico

## Part Numbering System



SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
L50S	10	L50S010	L50S010.T
L50S	500	L50S500	L50S500.X

## Recommended Fuse Holder

LSCR001 (35-200 A)  
LSCR002 (225-800 A)

## Web Resources

Download technical documents: [littelfuse.com/L50S](http://littelfuse.com/L50S)



# L50S SERIES HIGH-SPEED FUSE

## Electrical Specifications

CATALOG NUMBER	AMPERE RATING	VOLTAGE RATING		INTERRUPT RATING		MELTING (PRE-ARC) I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	TOTAL CLEARING I <sup>2</sup> t (A <sup>2</sup> s)	WATTS LOSS AT 100% RATED CURRENT (W)	WATTS LOSS AT 80% RATED CURRENT (W)
		AC	DC	AC	DC		100 kA @ 500 Vac	200 kA @ 500 Vac	20 kA @ 450 Vdc		
							100 kA @ 500 Vac	200 kA @ 500 Vac	20 kA @ 450 Vdc		
L50S010	10	500	450	200kA	20kA	21	112	128	85	2	1
L50S012	12	500	450	200kA	20kA	26	149	170	97	2	1
L50S015	15	500	450	200kA	20kA	34	222	250	116	2	2
L50S020	20	500	450	200kA	20kA	48	363	400	143	5	3
L50S025	25	500	450	200kA	20kA	62	528	600	170	7	4
L50S030	30	500	450	200kA	20kA	77	707	820	193	10	5
L50S035	35	500	450	200kA	20kA	130	1,120	1,210	400	6	3
L50S040	40	500	450	200kA	20kA	161	1,420	1,550	525	7	4
L50S050	50	500	450	200kA	20kA	222	2,150	2,360	867	11	6
L50S060	60	500	450	200kA	20kA	259	3,016	3,300	1,287	13	7
L50S070	70	500	450	200kA	20kA	420	4,100	4,930	1,670	17	10
L50S080	80	500	450	200kA	20kA	554	5,300	6,950	2,240	19	10
L50S090	90	500	450	200kA	20kA	677	6,750	9,500	2,900	24	13
L50S100	100	500	450	200kA	20kA	807	8,273	12,600	3,626	30	16
L50S125	125	500	450	200kA	20kA	1,290	13,100	19,000	5,150	22	12
L50S150	150	500	450	200kA	20kA	2,504	19,100	26,500	6,700	27	15
L50S175	175	500	450	200kA	20kA	3,224	26,300	35,000	8,700	33	17
L50S200	200	500	450	200kA	20kA	3,938	34,233	44,583	11,297	35	19
L50S225	225	500	450	200kA	20kA	6,034	43,500	56,000	14,750	31	17
L50S250	250	500	450	200kA	20kA	7,510	54,000	69,000	19,600	36	19
L50S275	275	500	450	200kA	20kA	9,000	65,500	82,000	25,500	41	22
L50S300	300	500	450	200kA	20kA	10,808	78,500	97,500	32,200	42	23
L50S350	350	500	450	200kA	20kA	16,500	107,000	132,000	50,100	50	28
L50S400	400	500	450	200kA	20kA	22,941	142,333	169,667	72,270	58	30
L50S450	450	500	450	200kA	20kA	29,300	178,500	208,000	95,000	58	32
L50S500	500	500	450	200kA	20kA	37,000	220,000	250,000	118,000	64	35
L50S550	550	500	450	200kA	20kA	45,851	311,667	347,333	176,766	75	41
L50S600	600	500	450	200kA	20kA	45,851	311,667	347,333	176,766	98	50
L50S700	700	500	450	200kA	20kA	82,396	460,000	622,333	289,000	96	51
L50S800	800	500	450	200kA	20kA	115,656	647,667	687,500	465,590	118	60

## Dimensions

AMPERE RATING	FIGURE NO.	DIMENSIONS INCHES (MM)							
		A	B	C	D	E	F	G	H
10 – 30	1	2 (50.8)	—	½ (12.7)	9/16 (14.3)	—	—	—	—
31 – 60	2	1 5/8 (41.3)	2 ¼ (57.2)	2 ½ (63.5)	3 3/16 (81.0)	1 3/16 (20.6)	2 3/32 (18.3)	1 1/32 (8.7)	1/8 (3.2)
61 – 100	3	2 1/8 (54.0)	2 1 1/16 (68.3)	3 (76.2)	3 5/8 (92.1)	1 (25.4)	.670 (17.0)	1 1/32 (8.7)	1/8 (3.2)
101 – 200	3	2 1/8 (54.0)	2 1 3/16 (71.4)	2 15/16 (74.6)	3 5/8 (92.1)	1 7/32 (31.0)	.895 (22.7)	5/16 (7.9)	3/16 (4.75)
201 – 400	3	2 3/32 (53.2)	2 29/32 (70.6)	3 13/32 (86.5)	4 1 1/32 (110.3)	1 1/2 (38.1)	1 (25.4)	1 3/32 (10.3)	1/4 (6.4)
401 – 600	3	2 7/32 (56.4)	2 29/32 (73.8)	3 17/32 (89.7)	4 1 5/32 (113.5)	2 (50.8)	1 1/2 (38.1)	1 3/32 (10.3)	1/4 (6.4)
601 – 800	3	2 7/32 (56.4)	4 3/32 (108.7)	4 5/8 (117.5)	6 1 5/32 (164.3)	2 1/2 (63.5)	2 (50.8)	1 1/32 (13.5)	3/8 (9.5)

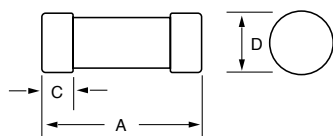


Figure 1

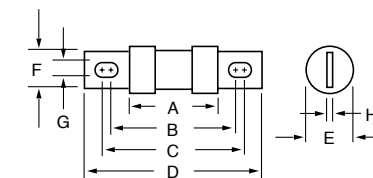


Figure 2

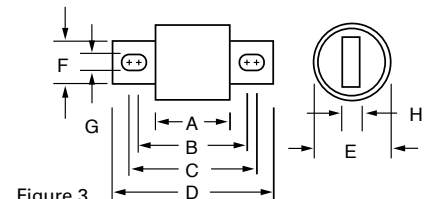


Figure 3

# L15S / L25S / L60S / KLC SERIES HIGH-SPEED FUSES

150/250/600 VAC • 1-1000 A • Traditional Round-Body Style



## 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)

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

#### L60S

600 Vac

#### KLC

600 Vac

### Interrupting Rating

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

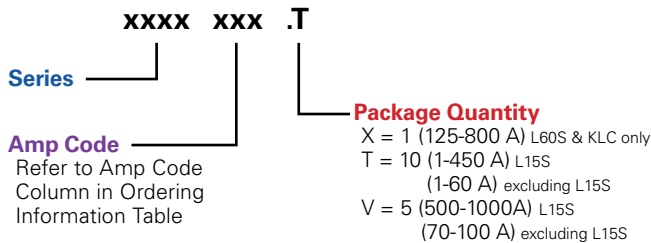
### Ampere Range

1 - 1000A (See Ordering Information Table for ratings available in each series)

### Approvals

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

## Part Numbering System



## Recommended Fuse Holders

1LFS101/1LFS102  
LSCR001/LSCR002

## Web Resources

For additional information, visit: [littelfuse.com/powr-speed](http://littelfuse.com/powr-speed)

## Ordering Information

AMP CODE	SERIES ORDERING NUMBER			
	L15S	L25S	L60S	KLC†
001	L15S001	L25S001	L60S001	KLC001
002	L15S002	L25S002	L60S002	KLC002
003	L15S003	L25S003	L60S003	KLC003
004	L15S004	L25S004	L60S004	KLC004
005	L15S005	L25S005	L60S005	KLC005
006	L15S006	L25S006	L60S006	KLC006
007	L15S007	—	—	KLC007
008	L15S008	L25S008	L60S008	KLC008
009	L15S009	—	—	—
010	L15S010	L25S010	L60S010	KLC010
012	L15S012	L25S012	L60S012	KLC012
015	L15S015	L25S015	L60S015	KLC015
17.5	—	—	L60S17.5	KLC17.5
020	L15S020	L25S020	L60S020	KLC020
025	L15S025	L25S025	L60S025	KLC025
030	L15S030	L25S030	L60S030	KLC030
035	L15S035	L25S035	L60S035	KLC035
040	L15S040	L25S040	L60S040	KLC040
045	L15S045	L25S045	L60S045	KLC045
050	L15S050	L25S050	L60S050	KLC050
060	L15S060	L25S060	L60S060	KLC060
070	L15S070	L25S070	L60S070	KLC070
080	L15S080	L25S080	L60S080	KLC080
090	L15S090	L25S090	L60S090	KLC090
100	L15S100	L25S100	L60S100	KLC100
110	—	—	—	KLC110
125	L15S125	L25S125	L60S125	KLC125
150	L15S150	L25S150	L60S150	KLC150
175	—	L25S175	L60S175	KLC175
200	L15S200	L25S200	L60S200	KLC200
225	—	L25S225	L60S225	KLC225
250	L15S250	L25S250	L60S250	KLC250
275	—	L25S275	—	—
300	L15S300	L25S300	L60S300	KLC300
350	L15S350	L25S350	L60S350	KLC350
400	L15S400	L25S400	L60S400	KLC400
450	L15S450	L25S450	L60S450	KLC450
500	L15S500	L25S500	L60S500	KLC500
550	—	—	—	—
600	L15S600	L25S600	L60S600	KLC600
700	—	L25S700	L60S700	KLC700
800	L15S800	L25S800	L60S800	KLC800
1000	L15S1000	—	—	—

† KLC series fuses are recommended for replacement use only.

*Note: High-Speed fuses are designed for fixed installations. They are not intended for use in moving vehicle applications.*

# L15S / L25S / L60S / KLC SERIES HIGH-SPEED FUSES

## Dimensions

AMPERE RATING	FIG. NO.	DIMENSIONS INCHES (MM)							
		A	B	C	D	E	F	G	H
<b>L15S Series, 150 Vac</b>									
1 – 30	1	1½ (38.1)	—	¾ (9.5)	1¾ (10.3)	—	—	—	—
31 – 60	1	2 (50.8)	—	⅝ (15.9)	1¾ (20.6)	—	—	—	—
61 – 450	3	1⅞ (29.4)	1⅞ (47.6)	2¾ (55.6)	2⅞ (67.5)	1 (25.4)	4¾ (17.1)	⅝ (7.9)	¾ (4.8)
451 – 1000	3	1¼ (31.8)	1⅞ (49.2)	2⅞ (65.1)	3½ (88.9)	1½ (38.1)	1 (25.4)	1¾ (10.3)	¼ (6.4)
<b>L25S Series, 250 Vac</b>									
1 – 30	1	2 (50.8)	—	½ (12.7)	9/16 (14.3)	—	—	—	—
31 – 60	2	1⅞ (41.3)	2¼ (57.2)	2½ (63.5)	3¾ (81.0)	1¾ (20.6)	2¾ (18.3)	1½ (8.7)	⅞ (3.2)
61 – 200	3	1⅞ (41.3)	2⅞ (58.7)	2⅞ (61.9)	3½ (79.4)	1½ (31.0)	1 (25.4)	⅝ (7.9)	¾ (4.8)
201 – 700	3	1⅞ (40.5)	2⅞ (57.9)	2⅞ (73.8)	3⅞ (97.6)	1½ (38.1)	1 (25.4)	1¾ (10.3)	¼ (6.4)
701 – 800	3	1⅞ (40.5)	2⅞ (57.9)	2⅞ (73.8)	3⅞ (97.6)	2 (50.8)	1½ (38.1)	1¾ (10.3)	¼ (6.4)
<b>L60S Series, 600 Vac</b>									
1 – 30	1	5 (127.0)	—	⅝ (15.9)	1¾ (20.6)	—	—	—	—
31 – 60	2	2⅞ (70.6)	3⅞ (87.3)	3⅞ (93.7)	4¾ (111.1)	1¾ (20.6)	2¾ (18.3)	1½ (8.7)	⅞ (3.2)
61 – 100	2	2⅞ (73.8)	3⅞ (89.7)	3⅞ (96.0)	4⅞ (113.5)	1½ (27.0)	2¾ (18.3)	1½ (8.7)	⅞ (3.2)
101 – 200	2	2⅞ (73.8)	3¾ (90.5)	3¾ (95.3)	4⅞ (111.9)	1½ (33.3)	1 (25.4)	⅝ (7.9)	¾ (4.8)
201 – 400	2	2⅞ (73.8)	3⅞ (100.8)	4⅞ (105.6)	5½ (130.2)	1¾ (40.1)	1 (25.4)	1¾ (10.3)	¼ (6.4)
401 – 600	2	2⅞ (73.0)	3⅞ (100.8)	4⅞ (105.2)	5½ (130.2)	2¼ (52.8)	1½ (38.1)	1¾ (10.3)	¼ (6.4)
601 – 800	2	3½ (77.0)	5⅞ (133.4)	5⅞ (135.7)	7¼ (184.2)	2½ (63.5)	2 (50.8)	1¾ (13.5)	¾ (9.5)
<b>KLC Series, 600 Vac</b>									
1 – 30	2	1⅞ (47.6)	2½ (63.5)	—	2⅞ (73.0)	9/16 (14.3)	1¾ (10.3)	¼ (6.4)	¾ (1.2)
31 – 60	2	2¾ (69.9)	3¾ (85.7)	3¾ (92.1)	4⅞ (109.5)	1¾ (20.6)	2¾ (18.3)	1½ (8.7)	⅞ (3.2)
61 – 100	3	2⅞ (73.0)	3⅞ (92.9)	4⅞ (103.2)	5 (127.0)	1 (25.4)	¾ (19.1)	1¾ (10.3)	⅞ (3.2)
101 – 200	3	2⅞ (72.2)	3⅞ (89.7)	4¾ (111.1)	5⅞ (129.4)	1½ (38.1)	1 (25.4)	1¾ (10.3)	¼ (6.4)
201 – 400	3	2⅞ (72.2)	4⅞ (118.3)	4⅞ (123.0)	6¼ (158.8)	2 (50.8)	1⅞ (41.3)	9/16 (14.3)	¼ (6.4)
401 – 800	3	2⅞ (72.2)	4⅞ (118.3)	5⅞ (135.7)	6¼ (158.8)	2½ (63.5)	2 (50.8)	9/16 (14.3)	¾ (9.5)

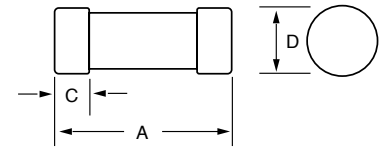


Fig. 1

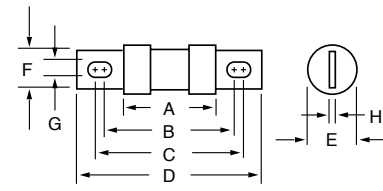


Fig. 2

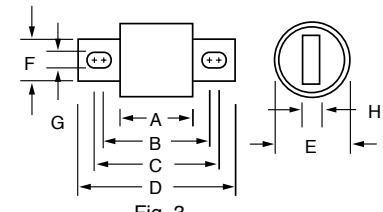


Fig. 3

# LSCR SERIES HIGH-SPEED FUSE BLOCKS

700 V / 1000 V



## Description

Littelfuse LSCR Series is a comprehensive line of modular fuse blocks, designed to accommodate a wide range of High-Speed and UL Power Fuses. These LSCR Series blocks have modular stud type design that enables easy mounting in panel boards.

LSCR Series blocks are CE Certified and RoHS Compliant.

## Features/Benefits

- Modular design reduces inventory requirements
- Sold in pairs for convenience
- Supplied with nut and Belleville washer
- 200kA Short-circuit withstand rating
- Constructed of molded phenolic (with plated steel studs) to provide greater heat dissipation

## Specifications

<b>Voltage Rating</b>	700 V / 1000 V
<b>Ampere Ratings</b>	400A, 800A and 1200A
<b>Withstand Rating</b>	200kA
<b>Approvals</b>	UL Recognized (File: E14721) cURus Recognized (E14721) CSA Certified (File: 73160)
<b>Material</b>	Base: Molded Phenolic or Thermoplastic Terminal Construction: Plated steel
<b>Flammability Rating</b>	UL94 V-0
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	LSCR0xx - China LSCR1xx - USA

## Web Resources

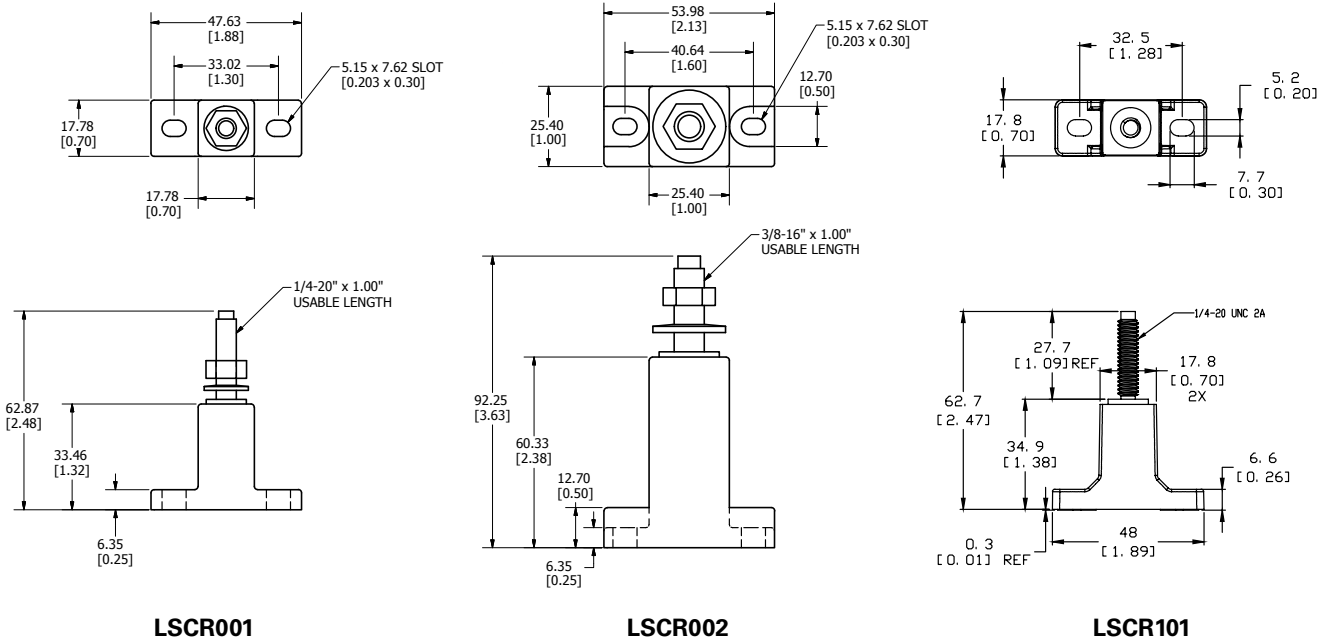
For more information, visit: [littelfuse.com/lscr](http://littelfuse.com/lscr)

## Electrical & Mechanical Specifications

CATALOG/ ORDERING NUMBER	AMPERE RATING	VOLTAGE RATING	TERMINAL (STUD) MATERIAL	INSULATOR		TERMINAL (STUD) SIZE	STUD TORQUE		MOUNTING FASTENER SIZE	FASTENER TORQUE		AGENCY APPROVALS		
				MATERIAL	MAX. BASE TEMPERATURE		(in.lbs)	(N-m)		(in.lbs)	(N-m)	UR	cURus	CSA
LSCR001	400A	700Vac/dc	Plated Steel	Molded Phenolic	150°C (302°F)	¼-20 UNC	61	6.9	#10	20-25	2.3-2.8	•		•
LSCR002	800A	700Vac/dc	Plated Steel	Molded Phenolic	150°C (302°F)	¾-16 UNC	192	21.7	#10	20-25	2.3-2.8	•		•
LSCR101	400A	1000Vac/dc	Steel, Zinc Plated	Thermoplastic	125°C (257°F)	¼-20 UNC	75	8.5	#10	25-30	2.8-3.4		•	
LSCR102	800A	1000Vac/dc	Steel, Zinc Plated	Thermoplastic	125°C (257°F)	¾-16 UNC	230	26	#10	25-30	2.8-3.4		•	
LSCR103	1200A	1000Vac/dc	Steel, Zinc Plated	Thermoplastic	125°C (257°F)	1/2-13 UNC	300	34	¼"	25-30	2.8-3.4		•	

# LSCR SERIES HIGH-SPEED FUSE BLOCKS

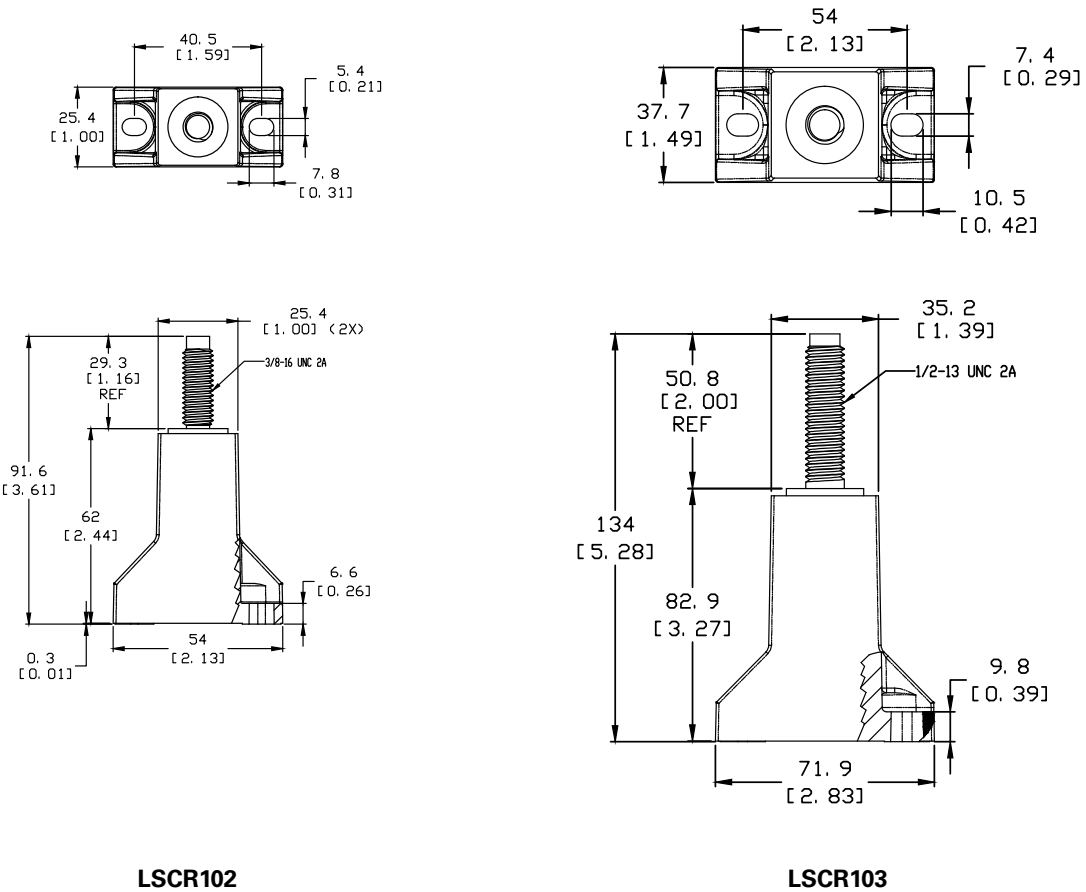
## Dimensions Millimeters [inches]



LSCR001

LSCR002

LSCR101



LSCR102

LSCR103



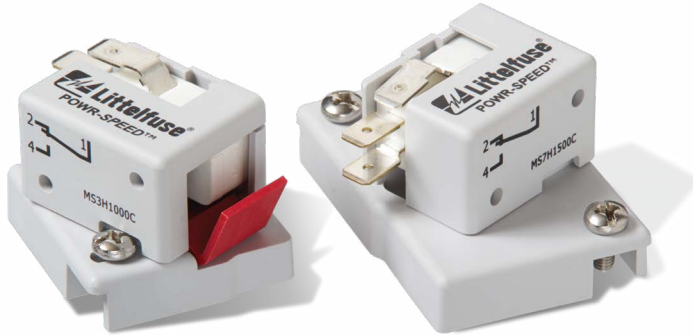
# LSCR SERIES HIGH-SPEED FUSE BLOCKS

## High-Speed Fuse Block Selection Guide

FUSE SERIES	CATALOG NUMBER	LSCR001	LSCR002	LSCR101	LSCR102	LSCR103
	TERMINAL SIZE	1/4 - 20 UNC	3/8 - 16 UNC	1/4 - 20 UNC	3/8 - 16 UNC	1/4 - 13 UNC
	VOLTAGE RATING	700VAC/DC	700VAC/DC	1000VAC/DC	1000VAC/DC	1000VAC/DC
	AMPERE RATING	400A	800A	400A	800A	1200A
L15S	70-400	X		X		
	500-800		X		X	
L17T	70-250	X		X		
	300-800		X		X	
L25S	35-200	X		X		
	225-800		X		X	
L50S	35-200	X		X		
	225-800		X		X	
L50QS	700-800					X
	35-200	X		X		
	225-800		X		X	
L60S	700-800					X
	35-200	X		X		
	225-800		X		X	
KLC	700-800					X
	35-60	X		X		
	70-800		X		X	
L70S	700-800					X
	35-100	X		X		
	125-800		X		X	
L70QS	700-800					X
	35-100	X		X		
	125-800		X		X	
JLLN	700-1200					X
	70-200	X		X		
	225-800		X		X	
JLLS	700-1200					X
	70-200	X		X		
	225-800		X		X	
JLS	70-100	X		X		
	110-200	X		X		
	225-400		X		X	
	450-600		X		X	
SPFJ	70-100			X		
	125-200			X		
	250-400				X	
	450					X

# MS SERIES HIGH-SPEED FUSE MICROSWITCH

1000C Contact Insulation Voltage (1000, 1500)



## Description

Littelfuse MS Series external mount Microswitches offer permanent blown fuse indication to PSR Series High-Speed Square-Body Semiconductor Fuses. They have one normally open (N.O.) and one normally closed (N.C.) contact rated for 4A, 250Vac.

These microswitches have a visual red flap or arm indicator that releases after fuse blown condition and can also be used for resetting the microswitch contacts.

## Features/Benefits

- Available in two sizes to fit PSR Series Fuse Case Sizes 30 - 33 and 70 - 73
- Internal microswitch UL Listed
- Red flap visual indicator and contact reset mechanism
- Minimum positive operating voltage and current at 4V/1mA

## Specifications

<b>Voltage Rating</b>	See Electrical Characteristics Table
<b>Amperage Rating</b>	See Electrical Characteristics Table
<b>Interrupting Rating</b>	See Electrical Characteristics Table -60°C to +125°C
<b>Relative Humidity</b>	95%
<b>Contact</b>	Silver-Nickel Plated Brass
<b>Approvals</b>	Internal Microswitch Part Number: U83161.8, Listed Under UL File: E42016
<b>Flammability</b>	UL 94 V2
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	China

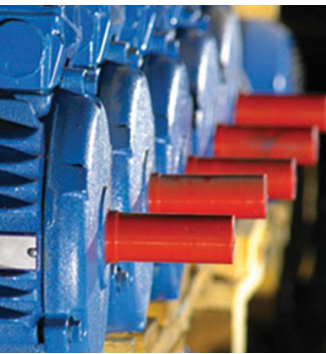
## Ordering Information

SERIES	CASE SIZE	CONTACT INSULATION VOLTAGE	CATALOG NUMBER	ORDERING NUMBER
MS	3H	1000C	MS3H1000C	MS3H1000C
MS	7H	1000C	MS7H1500C	MS7H1500C

## Electrical Characteristics

CATALOG NUMBER / ORDERING NUMBER	INDICATING STYLE	INSULATION VOLTAGE RATING (VAC)	FUSE CASE SIZE	POSITIVE OPERATING MIN VOLTAGE / MIN CURRENT	INTERRUPTING RATING						RELATIVE HUMIDITY	PACK QUANTITY	
					CURRENT	NON-INDUCTIVE LOAD			INDUCTIVE LOAD (DC L/R=25MS)				
						30V	110V	250V	30V	110V			250V
MS3H1000C*	Standard NO-NC	1000	30 - 33	4V / 1mA	AC (50/60 Hz)	5A	5A	5A	5A	5A	4A	95%	3 Pcs/Bag
					DC	5A	0.6A	0.3A	3A	0.2A	0.1A		
MS7H1500C*	Standard NO-NC	1500	70 - 73	4V / 1mA	AC (50/60 Hz)	5A	5A	5A	5A	5A	4A	95%	3 Pcs/Bag
					DC	5A	0.6A	0.3A	3A	0.2A	0.1A		

\* Contains internal microswitch (Part Number: U83161.8), listed under UL File: E42016.



## SECTION OVERVIEW

High-speed fuses are often best suited for power conversion and conditioning applications such as drives, inverters, UPS and rectifiers. However, based on the design of individual systems, standard UL Class fuses such as Class T, Class J, Class L, Class CC and Supplementary Midget fuses will often provide enough protection to strike the optimal balance between performance, efficiency and cost. Littelfuse also offers a broad line of fuses and holders that are designed to meet solar DC standards, as well as telecom protection products.

For additional application support, cross reference or product details please visit our website or call 1-800-TEC-FUSE to find out more about these products.

## FAST-ACTING PRODUCTS

### UL Class L

LDC Series POWR-PRO® Fuses .....26

### UL Class J

JLS Series Fuses .....27

### UL Class T

JLLN / JLLS Series Fuses .....28

### UL Class CC / Midget

KLKR / KLKD Series Fuses .....29

### Telecommunications

L17T / TLS Series Telecom Power Fuses .....30

## UL ACCESSORIES

Class J Blocks .....31

Class T Blocks .....32

Class CC / Midget Holders .....33

# LDC SERIES POWR-PRO® FUSES

600 VAC/DC • Fast Acting • 150-2000 A



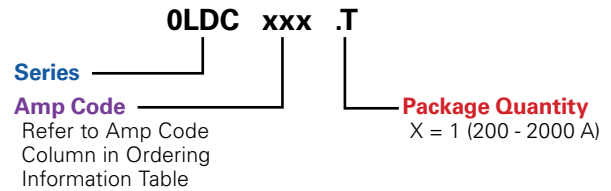
**POWR-PRO®**



## Specifications

<b>Voltage Ratings</b>	600 Vac/dc or less
<b>Ampere Range</b>	150–2000 A
<b>Interrupting Ratings</b>	AC: 200 kA rms symmetrical DC: 50 kA
<b>Time Constant</b>	16 ms
<b>Approvals</b>	Standard 248-10, Class L UL Listed 601–2000 A (File: E81895) UL Recognized 150–600 A (File: E71611) CSA Certified (File: LR29862)
<b>Material</b>	Melamine body, Copper caps (silver plated)
<b>Country of Origin</b>	Mexico

## Part Numbering System



## Description

High DC voltage and interrupting ratings make the POWR-PRO® LDC ideal for DC applications. The DC interrupting performance exceeds UL listing requirements.

## Features/Benefits

- POWR-PRO® Performance
- Extremely Current-Limiting
- 600 Vac/dc rated
- 200 kA AC Interrupting Rating
- 50 kA DC Interrupting Rating

## Applications

- Solar inverter and array protection
- UPS protection especially for large battery circuits
- DC distribution and variable speed drives
- Mass transit systems

## Ordering Information

AMPERE RATINGS				
150	450	750	1201	1601
200	500	800	1300	1800
250	600	900	1350	1900
300	601	1000	1400	2000
350	650	1100	1500	
400	700	1200	1600	

SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
LDC	700	LDC700	0LDC700.X

## Web Resources

Download TC curves, CAD drawings and other technical documents: [littelfuse.com/ldc](http://littelfuse.com/ldc)

# JLS SERIES FUSES

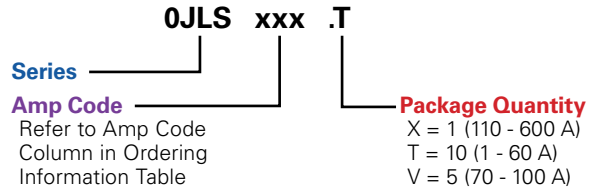
600 VAC • Fast-Acting • 1-600 A



## Specifications

<b>Voltage Ratings</b>	600 Vac or less
<b>Ampere Range</b>	1–600 A
<b>Interrupting Ratings</b>	200 kA rms symmetrical
<b>Approvals</b>	Standard 248-8, Class J UL Listed (File: E81895) CSA Certified (File: LR29862) Federal Specification WF-1814 (QPL-W-F-1814)

## Part Numbering System



## Description

The UL Listed Class J JLS Series fuses provide space saving, fast-acting overload and short-circuit protection for vital industrial and power conversion applications.

Littelfuse’s JLS Series fuses offer best in class current limitation that prevents equipment damage from overcurrent faults.

## Features/Benefits

- Superior performance in a space saving package
- Reliable interruption of all overcurrents with protection up to 200kA
- Extremely current limiting
- Fast-acting protection for surge-sensitive devices and components
- Reduces heating and magnetic effects due to overcurrents, extending equipment life
- Economical and readily available

## Applications

- Power conversion device protection
- Variable speed drives
- Rectifiers
- Resistive loads
- Solid-state devices

## Ordering Information

AMPERE RATINGS					
1	20	45	90	175	350
3	25	50	100	200	400
6	30	60	110	225	450
10	35	70	125	250	500
15	40	80	150	300	600

SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
JLS	110	JLS110	0JLS110.X

## Recommended Fuse Holders

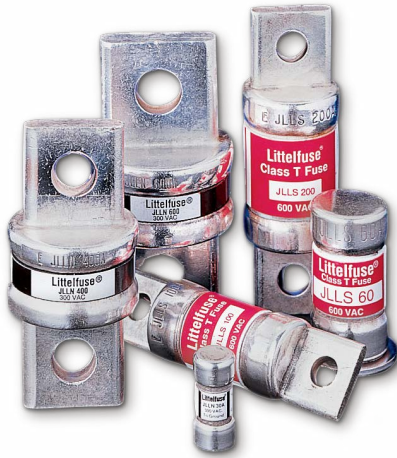
LFJ60 Series  
LFPSJ Series (1–60 A)

## Web Resources

Download TC curves, CAD drawings and other technical information: [littelfuse.com/jls](http://littelfuse.com/jls)

# JLLN / JLLS SERIES FUSES

300/600 VAC • Fast-Acting • 1-1200 A



## Description

JLLN / JLLS fuses are less than 1/3 the size of comparable Class R fuses and are typically used for short circuit protection of drives and surge sensitive components. When rated in accordance with the NEC®, JLLN / JLLS fuses provide fast-acting overload and short circuit protection for non-inductive circuits and equipment.

## Features/Benefits

- Extremely current-limiting
- Compact design
- 200 kA Interrupting Rating
- JLLN 35-60A available with PCB mounts

## Ordering Information

AMPERE RATINGS					
1	25	70	175	450	1100
2	30	80	200	500	1200
3	35	90	225	600	
6	40	100	250	700	
10	45	110	300	800	
15	50	125	350	900*	
20	60	150	400	1000	

\*JLLS only

## Recommended Fuse Holders

LFT30 Series  
LFT60 Series  
LSCR Series for 70-800 A

## Web Resources

Download TC Curves, CAD drawings and other technical information: [littelfuse.com/jlln](http://littelfuse.com/jlln)  
[littelfuse.com/jlls](http://littelfuse.com/jlls)

## Specifications

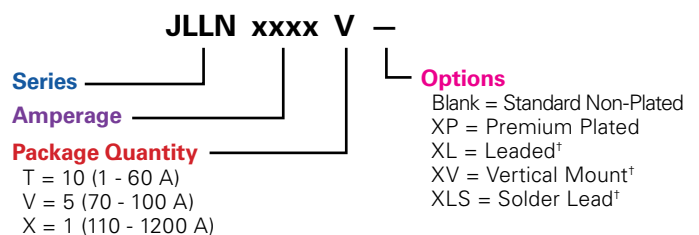
### JLLN

<b>Voltage Ratings</b>	AC: 300 V DC: 160 V (1 - 60 A) 125 V (70 - 1200 A)
<b>Ampere Range</b>	1 – 1200 A
<b>Interrupting Ratings</b>	AC: 200 kA rms symmetrical DC: 50kA (1 - 30A) 20kA (35 - 1200A)
<b>Approvals</b>	AC: UL Standard 248-15, Class T UL Listed (File: E81895): 1 – 1200 A CSA Certified (File: LR29862): 1 – 600 A DC: UL Listed (File: E81895): 1 – 1200 A 1-30 A: Melamine body, Bronze caps 35-1200 A: Melamine body, Copper caps
<b>Material</b>	RoHS Compliant

### JLLS

<b>Voltage Ratings</b>	AC: 600 V DC: 300 V
<b>Ampere Range</b>	1 – 1200 A
<b>Interrupting Ratings</b>	AC: 200 kA rms symmetrical DC: 20kA
<b>Approvals</b>	AC: UL Standard 248-15, Class T UL Listed (File: E81895): 1 – 1200 A CSA Certified (File: LR29862): 1 – 600 A DC: Littelfuse self-certified
<b>Material</b>	1-30 A: Melamine body, Copper caps 35-60 A: Melamine body, Bronze caps 70-1200 A: Melamine body, Copper caps
<b>Environmental</b>	RoHS Compliant

## Part Numbering System



SERIES	AMP	PACK SIZE	PLATING SUFFIX	MOUNT SUFFIX	CATALOG NUMBER	ORDERING NUMBER
JLLS	6	T	–	–	JLLS006	JLLS006.T
JLLN	35	T	–	XL†	JLLN035L	JLLN035.TXL
JLLN	100	V	XP	–	JLLN100P	JLLN100.VXP

†Option is available for JLLN 35-60 A only. Premium plating is standard



# KLKR / KLKD SERIES FUSES

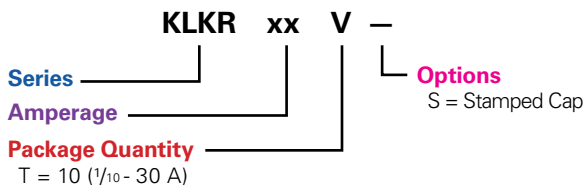
**KLKR Series**  
600 VAC/300 VDC  
Fast-Acting  
1/10-30 A



## Specifications

<b>Voltage Rating</b>	AC: 600 Vac or less DC: 300 Vdc
<b>Ampere Range</b>	1/10 – 30 A
<b>Interrupting Rating</b>	AC: 200 kA rms symmetrical DC: 20 kA
<b>Approvals</b>	AC: Standard 248-4, Class CC UL Listed 1/10 – 30 A (File: E81895) CSA Certified 1/10 – 30 A (File: LR29862) DC: Littelfuse self-certified
<b>Material</b>	Melamine body, Bronze caps (nickel plated)
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	Mexico

## Part Numbering System



## Recommended Fuse Holders

L60030C Series  
LPSC Touch-Safe Series

## Web Resources

For additional information, visit: [Littelfuse.com/klkr](http://Littelfuse.com/klkr)

## Ordering Information

AMPERE RATINGS				
1/10	1/2	2 1/2	6	12
1/8	3/4	3	7	15
2/10	1	3 1/2	8	20
1/4	1 1/2	4	9	25
3/10	2	5	10	30

SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
KLKR	12	KLKR012	KLKR012.T

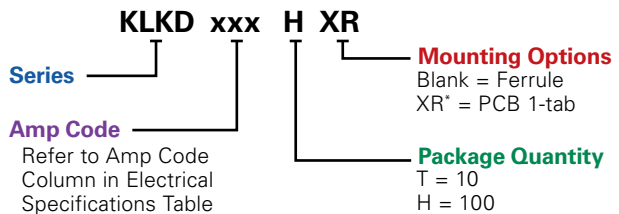
**KLKD Series**  
Midget  
600 VAC/DC  
Fast Acting  
1/10-30 A



## Specifications

<b>Voltage Rating</b>	600 Vac/Vdc
<b>Amperage Rating</b>	1/10, 1/8, 2/10, 1/4, 3/10, 1/2, 3/4, 1, 1 1/2, 2, 2 1/2, 3, 3 1/2, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 25, 30
<b>Interrupting Ratings</b>	AC: 100 kA 200 kA Littelfuse self-certified DC: 1/10-30: 10 kA (UL 2579) 1/10-30: 50 kA (UL 248-14)
<b>Material</b>	Body: Melamine / Caps: Copper Alloy
<b>Operating Temperature</b>	See Derating Curve
<b>Approvals</b>	UL 2579 Listed (File: E339112) IEC 60269-6 (2-25 A) VDE Certified (No. 40033094) UL 248-14 Listed (File: E10480) CSA Certified Ferrule only (File: LR29862)
<b>Environmental</b>	RoHS Compliant
<b>Country of Origin</b>	Mexico

## Part Numbering System



## Recommended Fuse Holders

LPSM and LPSM Dead-Front Series  
L60030M Open-Face Series

## Web Resources

For additional information, visit: [Littelfuse.com/klkd](http://Littelfuse.com/klkd)

## Ordering Information

AMPERE RATINGS								
FERRULE					PCB 1-TAB			
1/10	1/2	2 1/2	6	12	1/10	4	12	
1/8	3/4	3	7	15	1/2	5	15	
2/10	1	3 1/2	8	20	1	6	20	
1/4	1 1/2	4	9	25	2	8	25	
3/10	2	5	10	30	3	10	30	

SERIES	AMP	PACKAGE QUANTITY	MOUNTING METHOD	CATALOG NUMBER	ORDERING NUMBER
KLKD	1/8	10	FERRULE	KLKD 1/8	KLKD.125T
KLKD	5	100	FERRULE	KLKD 5	KLKD005.H
KLKD	15	100	PCB 1-TAB	KLKD 15-R	KLKD015.HXR

\*Only available in 100 packs (H) and select ratings.

# L17T / TLS SERIES TELECOM POWER FUSE

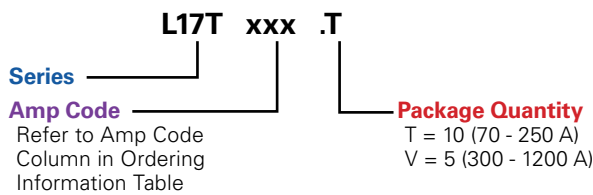
**L17T Series**  
170 VDC  
Current-Limiting  
70-1200 A



## Specifications

**Voltage Rating** 170 VDC  
**Interrupting Rating** 100 kA  
**Ampere Range** 70 – 1200 A  
**Approvals** UL Recognized (File: E71611)  
 CSA Recognized (File: LR29862)

## Part Numbering System



## Recommended Fuse Holders

LTFD 6001 and LTFD 1200 series, visit: [Littelfuse.com/ltfd](http://Littelfuse.com/ltfd)

## Web Resources

For additional information, visit: [Littelfuse.com/l17t](http://Littelfuse.com/l17t)

## Ordering Information

AMPERE RATINGS						
70	125	200	300	450	800	1100
90	150	225	350	500	900	1200
100	175	250	400	600	1000	—

SERIES	VOLTAGE	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
L17T	170	1200	L17T 1200	L17T1200V

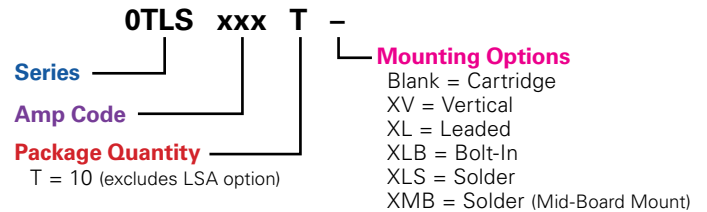
**TLS Series**  
170 VDC  
Current-Limiting  
1-125 A



## Specifications

**Voltage Rating** 170 Vdc  
**Ampere Range** 1 – 125 A  
**Interrupting Rating** 100 kA  
**Approvals** UL Recognized (File: E71611)  
**Construction** Body: Glass melamine  
 Caps: Silver-plated brass  
**Environmental** RoHS Compliant, Lead (Pb) Free

## Part Numbering System



## Recommended Fuse Holders

LFT30060 for TLS series cartridge style fuse

## Web Resources

For additional information, visit: [Littelfuse.com/tls](http://Littelfuse.com/tls)

## Ordering Information

AMPERE RATINGS				
1	6	25	50	90
2	10	30	60	100
3	15	35	70	110*
5	20	40	80	125*

\*Available in standard cartridge only.

SERIES	AMP	MOUNTING METHOD	MOUNTING SUFFIX	CATALOG NUMBER	ORDERING NUMBER
TLS	6	Cartridge	—	TLS006	OTLS006.T
TLS	15	Vertical	V	TLS015V	OTLS015.TXV
TLS	35	Leaded	L	TLS035L	OTLS035.TXL
TLS	50	Bolt-In	LB	TLS050LB	OTLS050.TXLB
TLS	80	Solder	LS	TLS080LS	OTLS080.TXLS
TLS	100	Solder	MB	TLS100MB	OTLS100.TXMB

# LF SERIES CLASS J FUSE BLOCKS

600 V



Patent  
US8810420

## Specifications

<b>Voltage Ratings</b>	600 V
<b>Ampere Ratings</b>	0 – 600 A
<b>Leakage Current</b>	<0.6 mA at 600 V
<b>Flammability Rating</b>	UL94 V-0
<b>Approvals</b>	UL Listed (File: E14721) CSA Certified (File: LR7316)
<b>Environmental</b>	RoHS Compliant, Lead (Pb) Free REACH Compliant

## Recommended Fuses

**Time Delay**  
Series: JTD\_ID  
Series: JTD

**Fast Acting**  
Series: JLS

For information about Touch-Safe Class J fuse holders:  
[Littelfuse.com/lfpsj](http://Littelfuse.com/lfpsj)

## Web Resources

Sample requests, downloadable CAD drawings, fuse block cover datasheet and other technical information:

[Littelfuse.com/fuseblocks](http://Littelfuse.com/fuseblocks)  
[Littelfuse.com/lfj](http://Littelfuse.com/lfj)

## Ordering Information (Class J 600 V)

AMP RATING	POLES	ORDERING NUMBER					TORQUE	TERMINAL	WIRE RANGE	WIRE TYPE	BASE TEMP RATING	DIN RAIL	INDICATION	COVER ORDERING NUMBER*
		BASE PART NUMBER	TERMINAL SUFFIX											
			BOX LUG HEX	BOX LUG SLOT	PRESSURE PLATE	SCREW								
30	1	LFJ600301	CID-HX	CID	PID	SID	2.8 N-m (25 in-lbs)	C	6-14 AWG	CU Only	125°C	•	•	LFJ60030FBC
	2	LFJ600302	CID-HX	CID	PID	SID		P	10-14 AWG					
	3	LFJ600303	CID-HX	CID	PID	SID		S	10-22 AWG					
60	1	LFJ600601	CID-HX	CID	—	—	5.6 N-m (50 in-lbs)	2-4 AWG		CU-AL	125°C	•	•	LFJ60060FBC
	2	LFJ600602	CID-HX	CID	—	—	2.8 N-m (25 in-lbs)	6-14 AWG						
	3	LFJ600603	CID-HX	CID	—	—		6-14 AWG						
100	1	LFJ601001	C	—	—	—	13.6 N-m (120 in-lbs)	2/0-6 AWG		CU-AL	130°C	—	•	LFJ60100FBC
	3	LFJ601003	C	—	—	—	4.5 N-m (40 in-lbs)	8 AWG						
200	1	LFJ602001	C	—	—	—	31.1 N-m (275 in-lbs)	250 kcmil-6		CU-AL	130°C	—	—	—
	3	LFJ602003	C	—	—	—		250 kcmil-6						
400	1	LFJ604001	C	—	—	—	31.1 N-m (275 in-lbs)	(2) 350 kcmil-1/0		CU-AL	130°C	—	—	—
	3	LFJ604003	C	—	—	—		(2) 350 kcmil-1/0						
600	1	LFJ606001	C	—	—	—	42.4 N-m (375 in-lbs)	(2) 500 kcmil-4		CU-AL	130°C	—	—	—
	3	LFJ606003	C	—	—	—		(2) 500 kcmil-4						

Note: Reinforcing springs standard on all Class J fuse blocks.  
\*Covers sold individually. One cover needed for each pole.

# LF SERIES CLASS T FUSE BLOCKS

300 V • 600 V



## Specifications

<b>Voltage Ratings</b>	300 VAC/600 VAC
<b>Ampere Ratings</b>	0 – 600 A
<b>Leakage Current</b>	<0.6 mA at 600 V
<b>Withstand Rating</b>	200 kA RMS SYM
<b>Flammability Rating</b>	UL94 V-0
<b>Approvals</b>	UL Listed (File: E14721) CSA Certified (File: LR7316)
<b>Environmental</b>	RoHS Compliant, Lead (Pb) Free

## Recommended Fuses

300V JLLN  
600V JLLS

## Web Resources

Sample requests, downloadable CAD drawings and other technical information: [Littelfuse.com/lft](http://Littelfuse.com/lft)  
[Littelfuse.com/fuseblocks](http://Littelfuse.com/fuseblocks)

## Ordering Information (Class T 300 V)

AMP RATING	ORDERING NUMBER							TORQUE	WIRE RANGE	WIRE TYPE	BASE TEMP RATING	DIN RAIL MOUNT	COVER ORDERING NUMBER*
	BASE ORDERING NUMBER	POLES			TERMINAL SUFFIX								
		1	2	3	BOX LUG	PRESSURE PLATE	SCREW						
30	LFT30030	1	2	3	C	—	—	5.6 N-m (50 in-lbs)	2-4 AWG	CU-AL Solid/Stranded	125°C	•	LFT30030FBC
								2.8 N-m (25 in-lbs)	6-14 AWG				
60	LFT30060	1	2	3	C	—	—	5.6 N-m (50 in-lbs)	2-4 AWG		125°C	•	LFT30060FBC
								2.8 N-m (25 in-lbs)	6-14 AWG				
100	LFT30100	1	—	3	CS	—	—	13.6 N-m (120 in-lbs)	2/0-6 AWG		130°C	—	LFT30100FBC
								4.5 N-m (40 in-lbs)	8 AWG				
200	LFT30200	1	—	3	CS	—	—	31.1 N-m (275 in-lbs)	250 kcmil-6	130°C	—	—	
								4.0 N-m (35 in-lbs)	10-14 AWG				
400	LFT30400	1	—	3	CS	—	—	(2) 31.1 N-m (275 in-lbs)	250 kcmil-6	130°C	—	—	
600	LFT30600	1	—	3	CS	—	—	(2) 42.4 N-m (375 in-lbs)	500 kcmil-6	130°C	—	—	

## Ordering Information (Class T 600 V)

AMP RATING	ORDERING NUMBER							TORQUE	WIRE RANGE	WIRE TYPE	BASE TEMP RATING	DIN RAIL MOUNT	COVER ORDERING NUMBER*
	BASE ORDERING NUMBER	POLES			TERMINAL SUFFIX								
		1	2	3	BOX LUG	PRESSURE PLATE	SCREW						
30	LFT60030	1	2	3	C	P	S	5.6 N-m (50 in-lbs)	2-4 AWG	CU-AL Solid/Stranded	125°C	•	LFT60030FBC
								2.8 N-m (25 in-lbs)	6-14 AWG				
60	LFT60060	1	2	3	C	—	—	5.6 N-m (50 in-lbs)	2-4 AWG		125°C	•	LFT60060FBC
								2.8 N-m (25 in-lbs)	6-14 AWG				
100	LFT60100	1	—	3	CS	—	—	13.6 N-m (120 in-lbs)	2/0-6 AWG		130°C	—	LT60100FBC
								4.5 N-m (40 in-lbs)	8 AWG				
200	LFT60200	1	—	3	CS	—	—	31.1 N-m (275 in-lbs)	250 kcmil-6	130°C	—	LT60200FBC	
								4.0 N-m (35 in-lbs)	10-14 AWG				
400	LFT60400	1	—	3	CS	—	—	(2) 31.1 N-m (275 in-lbs)	250 kcmil-6	130°C	—	LT60400FBC	
600	LFT60600	1	—	3	CS	—	—	(2) 42.4 N-m (375 in-lbs)	500 kcmil-6	130°C	—	LT60600FBC	

\* Covers sold individually. One cover needed for each pole.  
† Wire Type for Pressure Plate and Screw Terminal is CU only

# LPSC / LPSM POWR-SAFE FUSE HOLDERS

600 V



## Specifications

<b>Voltage Rating</b>	600 Vac/dc
<b>Ampere Rating</b>	30 A
<b>Interrupting Rating</b>	200 kA (Class CC) 100 kA (Midget)
<b>Terminal Type</b>	Pressure plate
<b>Suggested Torque</b>	17.7 in-lbs
<b>Wire Range</b>	#8–#14 CU
<b>Material</b>	Thermoplastic
<b>Flammability Rating</b>	UL94 V-0
<b>Approvals</b>	UL Listed (LPSC File: E14721) UL Recognized (LPSM File: E14721) CSA Certified (LPSC/LPSM File: LR7316) RoHS compliant, Lead (Pb) Free
<b>Environmental</b>	

## Recommended Fuses

Class CC  
Midget-Style (10 x 38 mm)

## Web Resources

Download CAD drawings and other technical information:  
[littelfuse.com/lpsc](http://littelfuse.com/lpsc)  
[littelfuse.com/lpsm](http://littelfuse.com/lpsm)

## Ordering Information

INDICATING		NON-INDICATING		FUSE TYPE	POLES
CATALOG NUMBER	ORDERING NUMBER	CATALOG NUMBER	ORDERING NUMBER		
LPSC001ID	LPSC0001ZXID	LPSC001	LPSC0001Z	Class CC	1
LPSC002ID	LPSC0002ZXID	LPSC002	LPSC0002Z	Class CC	2
LPSC003ID	LPSC0003ZXID	LPSC003	LPSC0003Z	Class CC	3
LPSC004ID	LPSC0004ZXID	LPSC004	LPSC0004Z	Class CC	4
LPSM001ID	LPSM0001ZXID	LPSM001	LPSM0001Z	Midget	1
LPSM002ID	LPSM0002ZXID	LPSM002	LPSM0002Z	Midget	2
LPSM003ID	LPSM0003ZXID	LPSM003	LPSM0003Z	Midget	3
LPSM004ID	LPSM0004ZXID	LPSM004	LPSM0004Z	Midget	4

**Multi-Pole Assembly Kit**    Ordering No. CYHP0001Z-KIT  
(Kit contains 20 connector pincers & 10 handle pins.)



# POWR-SPEED® FUSE CROSS REFERENCE GUIDE



This guide covers the most popular high-speed fuse types that Littelfuse has in stock and ready to ship! The cross reference is meant to serve as a guide for quick identification and product selection. We suggest you check all applicable specifications before making substitutions.

COMPETITOR	LITTELFUSE	COMPETITOR	LITTELFUSE	COMPETITOR	LITTELFUSE
170M	PSR	A60X	L60S	PSC	PSR
A_UD	PSR	A70P	L70S	RFA	L15S
A013F	L15S	A70QS	L70QS	RFC	KLC
A015F	L15S	CHSF	L50QS	RFL (750V)	L70S (700 V)
A015R	L15S	FWA	L15S † §	RFV	L50S
A025F	L25S	FWH	L50S † §	SF13X	L15S
A050F	L50S	FWP	L70S * §	SF25X	L25S
A060F	L60S	FWX	L25S * †	SF50P	L50S
A070F	L70S	KAA	L15S	SF60X	L60S
A13X	L15S	KAB	L25S	SF70P	L70S
A25X	L25S †	KAC	KLC	XL25X	L25S
A50P (type 1 & 4)	L50S	KBH	L50S	XL50F	L50S *
A50QS	L50QS	PC_UD	PSR	XL70F	L70S *

\* Check specific mounting dimensions before substituting.

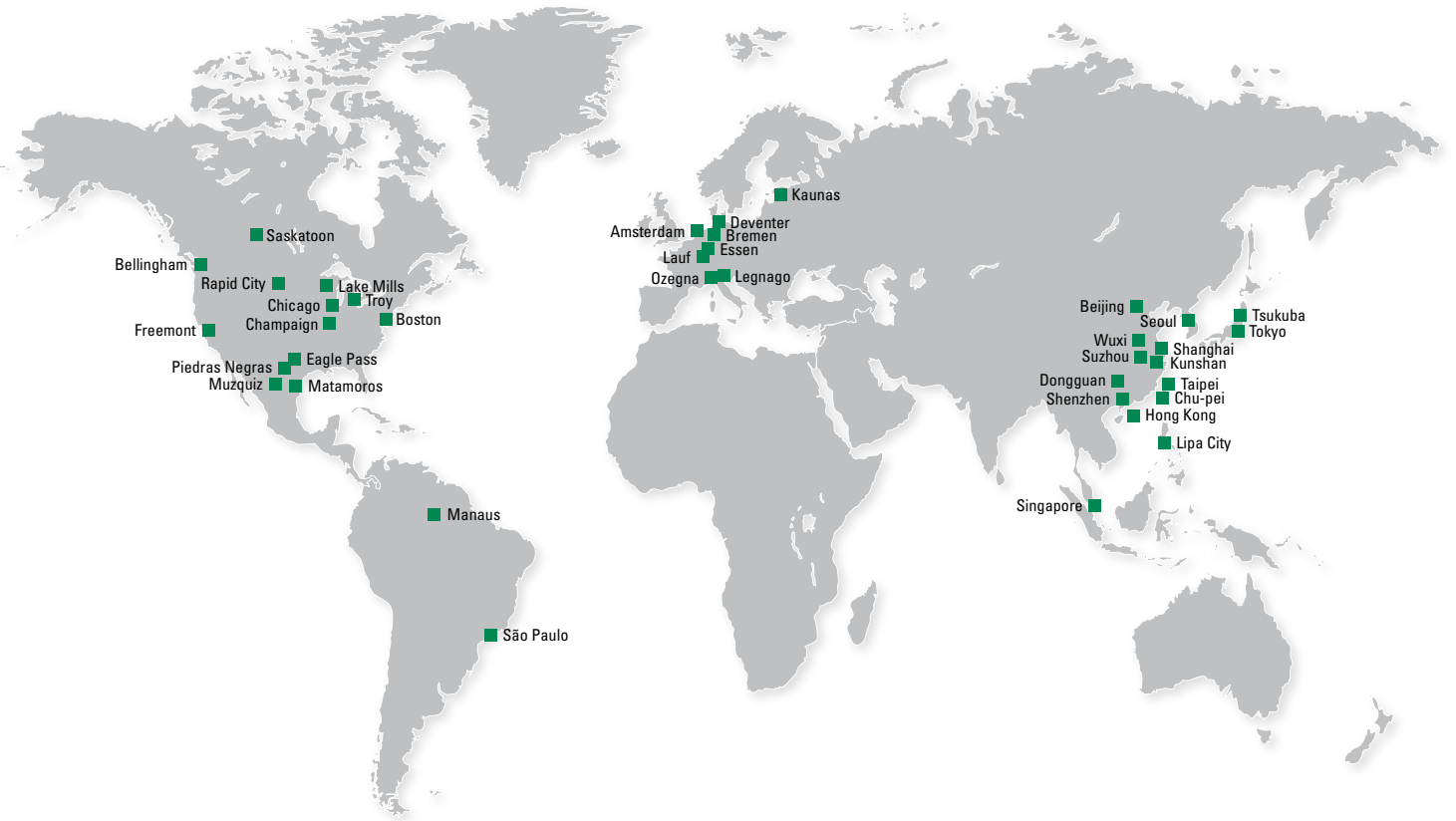
† Check characteristics and dimensions for application before substituting.

§ Verify voltage for DC applications.

For more information or a complete listing of high-speed fuses offered visit [Littelfuse.com/POWR-SPEED](http://Littelfuse.com/POWR-SPEED) or call **1-800-TEC-FUSE**.



# Local Resources for a **GLOBAL** Market



## Protection Relays & Controls Catalog (PF130N)

The comprehensive line of electronic and microprocessor-based protection relays safeguard equipment and personnel to prevent expensive damage, downtime or injury due to electrical faults.



## Fuses and Fuse Holders Catalog (PF101N)

Littelfuse offers a complete circuit protection portfolio of industrial power fuses, including time-saving indication products for an instant visual blown-fuse identification.



## POWR-GARD® Solar Catalog (PF140N)

POWR-GARD® Solar Products are designed specifically for photovoltaic applications where issues such as heat, efficiency, longevity and global standards impact the choices in selecting circuit protection.

To view all Littelfuse product catalogs, visit our website at [littelfuse.com/Catalogs](http://littelfuse.com/Catalogs)

## Visit Technical Resources at [Littelfuse.com](http://Littelfuse.com)

Technical information is only a click away. The Littelfuse Technical Resources contains datasheets, product manuals, whitepapers, application guides, demos, on-line design tools, and more.

## An Extension of Your Team

### Technical Hotline (800-TEC-FUSE or 800-832-3873)

Littelfuse engineers are a phone call away to help identify potential issues and provide product recommendations to resolve problems.

### Application and Field Support

Our experienced product and application engineers work step-by-step with customers from design to installation to determine the best solution.

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