

# POWR-GARD® Fuse Datasheet

## LVSP Surge Suppression Fuse

600 V ac • 5-100 kA



### Description

The Littelfuse Varistor Protection (LVSP) Fuses are intended for the protection of TVSS products. The LVSP series has been designed to survive the 8 x 20 μs lightning surges described in various standards (UL 1449, IEC 61000-4-5 and IEEE C62.41) without opening. This allows the TVSS to perform the necessary suppression. The LVSP is not rated for continuous current and the ratings are specific 8 x 20 μs surge capability. The LVSP series can be used to facilitate TVSS module compliance to UL 1449 in permanently connected applications (abnormal overvoltage, unlimited current conditions).

### Features/Benefits

- Very current limiting under AC short-circuit conditions
- Available in multiple mounting configurations (cartridge, bolt-in, PC board mount)
- Provides short circuit protection in TVSS systems and complements the Littelfuse line of overvoltage products (HA, HB34, TMOV® and iTMOV® varistors as well as the AK-10 series TVS diodes)

### Applications

- TVSS products
- Surge arrestors

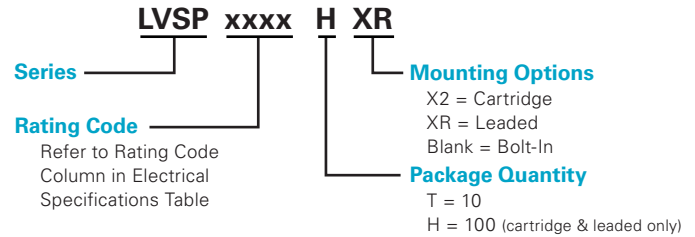
### Electrical Specifications

SURGE RATING	RATING CODE	VOLTAGE RATING (A)	INTERRUPT RATING (kA)	CARTRIDGE		LEADED		BOLT-IN		8 X 20 μS SURGE RATING	NOMINAL MELTING I <sup>2</sup> T (A <sup>2</sup> S)	NOMINAL CLEARING I <sup>2</sup> T (A <sup>2</sup> S)	I <sub>peak</sub> @100 kA 60 HZ (A)
				CATALOG NUMBER	ORDERING NUMBER	CATALOG NUMBER	ORDERING NUMBER	CATALOG NUMBER	ORDERING NUMBER				
5	0005	600	200	LVSP5-2	LVSP0005TX2	LVSP5-R	LVSP0005TXR	-	-	5,000	359	981	3,700
10	0010	600	200	LVSP10-2	LVSP0010TX2	LVSP10-R	LVSP0010TXR	-	-	10,000	1,300	3,210	5,823
15	0015	600	200	LVSP15-2	LVSP0015TX2	LVSP15-R	LVSP0015TXR	-	-	15,000	3,267	6,235	7,765
20	0020	600	200	LVSP20-2	LVSP0020TX2	LVSP20-R	LVSP0020TXR	-	-	20,000	4,940	11,710	8,135
30	0030	600	200	LVSP30-2	LVSP0030TX2	-	-	LVSP30	LVSP0030T	30,000	11,950	35,325	12,478
40	0040	600	200	LVSP40-2	LVSP0040TX2	-	-	LVSP40	LVSP0040T	40,000	20,550	61,700	15,250
60	0060	600	200	LVSP60-2	LVSP0060TX2	-	-	LVSP60	LVSP0060T	60,000	39,240	145,555	19,604
80	0080	600	200	LVSP80-2	LVSP0080TX2	-	-	LVSP80	LVSP0080T	80,000	75,000	254,000	24,600
100	0100	600	200	-	-	-	-	LVSP100-L	LVSP0100VXL	100,000	160,747	413,000	36,600

### Specifications

<b>Voltage Rating</b>	600 V ac
<b>Interrupting Rating</b>	200 kA
<b>Ratings</b>	5 – 100 kA 8 x 20 μs surge withstand
<b>Approvals</b>	UL Recognized (File: E71611)
<b>Environmental</b>	RoHs Compliant

### Part Numbering System



SERIES	SURGE RATING	RATING CODE	PACKAGE QUANTITY	MOUNTING METHOD	CATALOG NUMBER	ORDERING NUMBER
LVSP	5	0005	10	CARTRIDGE	LVSP05-2	LVSP0005TX2
LVSP	15	0015	10	CARTRIDGE	LVSP15-2	LVSP0015TX2
LVSP	20	0020	100	LEADED	LVSP20-R	LVSP0020HXR
LVSP	80	0080	10	BOLT-IN	LVSP80	LVSP0080T

### Recommended Fuse Blocks

#### LVSP (5-20)-2

L60030M (open block) • LPSM (dead front)

#### LVSP (30-80)-2

LFJ60030 (open block) • LFPSJ30 (dead front)

#### LVSP (100)

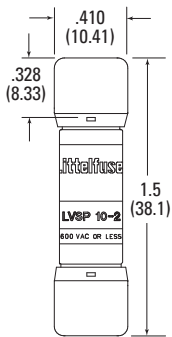
LFJ60100 (open block)

### Web Resources

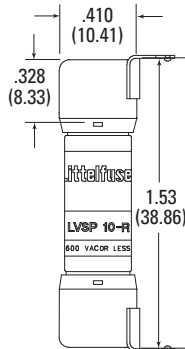
Download other technical information:  
[littelfuse.com/lvsp](http://littelfuse.com/lvsp)

### Dimensions Inches (mm)

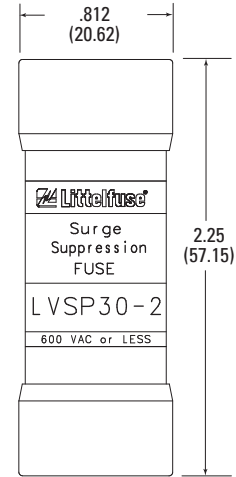
Cartridge 5-20 A



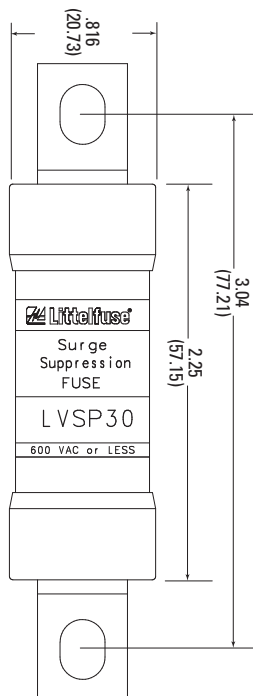
Leaded 5-20 A



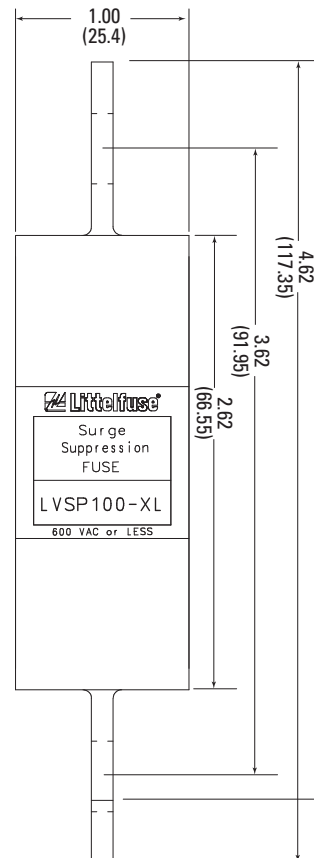
Cartridge 30-80 A



Bolt-In 30-80 A



Bolt-In 100 A



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