

# POWR-GARD® Fuse Datasheet

## LVSP Surge Suppression Fuse

600 V ac • 5–100 kA 8/20  $\mu$ s



### Description

The Littelfuse Varistor Protection (LVSP) Fuses are intended for the protection of TVSS products. The LVSP series has been designed to survive 8/20  $\mu$ s lightning surges without opening. This allows the TVSS to perform the necessary suppression. The LVSP is not rated for continuous current and the ratings are specific 8/20  $\mu$ s 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 Protective Devices

### Specifications

<b>Voltage Rating</b>	600 V ac
<b>Interrupting Rating</b>	200 kA
<b>Surge Withstand Rating</b>	5–100 kA 8/20 $\mu$ s surge withstand
<b>Approvals</b>	UL Recognized (File: E71611)
<b>Environmental</b>	RoHS Compliant
<b>Applicable Standards</b>	UL 248-1

### 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

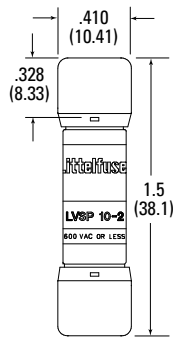
Download other technical information:  
[littelfuse.com/LVSP](http://littelfuse.com/LVSP)

### Electrical Specifications

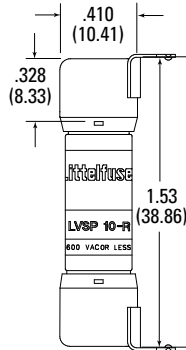
SURGE RATING (kA 8/20 $\mu$ s)	RATING CODE	VOLTAGE RATING (V)	INTERRUPT RATING (kA)	CARTRIDGE		LEADED		BOLT-IN		NOMINAL MELTING I <sup>2</sup> T (A <sup>2</sup> S)	NOMINAL CLEARING I <sup>2</sup> T (A <sup>2</sup> S)	I <sub>peak</sub> @100 kA 60 Hz (A)
				CATALOG NUMBER	ORDERING NUMBER	CATALOG NUMBER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

### Dimensions Inches (mm)

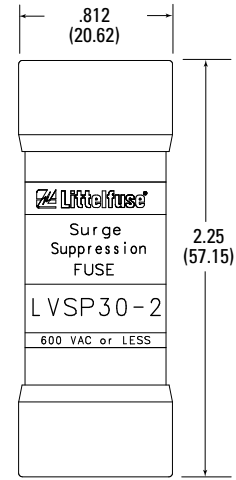
Cartridge 5-20 kA



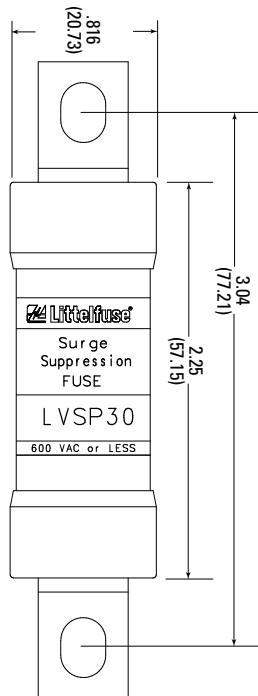
Leaded 5-20 kA



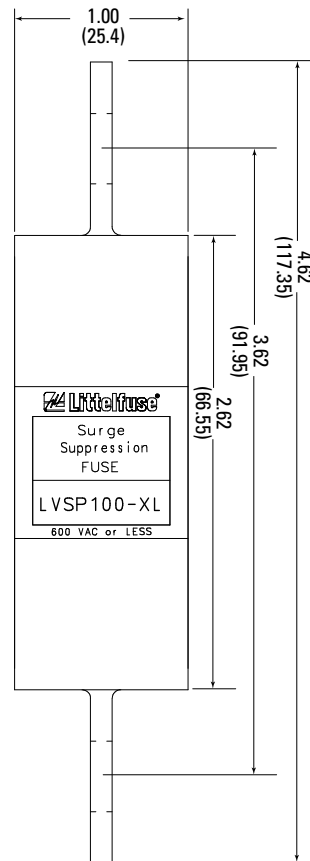
Cartridge 30-80 kA



Bolt-In 30-80 kA



Bolt-In 100 kA



**Disclaimer Notice** – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/product-disclaimer](http://www.littelfuse.com/product-disclaimer).