

POWR-GARD® Fuse

SPXV-S SERIES SOLAR FUSE

1500 V dc • 1 – 20 A



Description

The Littelfuse SPXV-S Series silver-plated string fuse has been specifically designed for the protection of photovoltaic (PV) systems.

It is available in multiple amperage ratings to match various requirements in a range of applications.

Features/Benefits

- Offers higher amperage protection in less space for increased design flexibility
- Full range, fast-acting fuse helps eliminate common low-overload faults
- Silver-plated caps help improve contact resistance for better conductivity
- Up to 50,000 A interrupting rating

Applications

- Inverters
- Combiner boxes

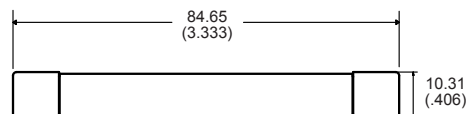
Recommended Crimping Tool

Fuse Holder: LFPXV001

Fuse Clips: 125003

Dimensions mm (inches)

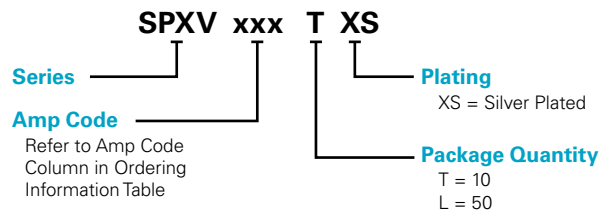
1 – 20 A



Specifications

Voltage Rating	1500 V dc
Amperage Rating	1, 2, 2.25, 2.5, 3, 3.5, 4, 4.5, 5, 6, 8, 10, 12, 15, 16, 20 A
Interrupting Rating	30 kA (50 kA Self-Certified)
Time Constant	≤ 1ms
Material	Body: Melamine Caps: Copper Alloy (Silver Plated)
Approvals	cULus (File: E339112)
Applicable Standards	UL 248-1, 248-19 IEC 60269-6
Environmental	RoHS Compliant REACH
Country of Origin	Mexico

Part Numbering System



SERIES	AMP	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
SPXVS	6	10	SPXV006-S	SPXV006.TXS
SPXVS	20	50	SPXV020-S	SPXV020.LXS

Web Resources

Download technical resources at:
Littelfuse.com/SPXVS

POWR-GARD® Fuse

SPXV-S SERIES SOLAR FUSE

Ordering Information

SERIES	AMPERAGE	AMPERE CODE	CATALOG NUMBER	FUSE LABEL ID	PACK QUANTITY	ORDERING NUMBER	UPC
SPXV	1	001.	SPXV001-S	SPXV 1-S	10	SPXV001.TXS	07945822105
					50	SPXV001.LXS	07945822106
SPXV	2	002.	SPXV002-S	SPXV 2-S	10	SPXV002.TXS	07945822107
					50	SPXV002.LXS	07945822108
SPXV	2.25	2.25	SPXV2.25-S	SPXV 2 ¼-S	10	SPXV2.25TXS	07945822109
					50	SPXV2.25LXS	07945822110
SPXV	2.5	02.5	SPXV02.5-S	SPXV 2 ½-S	10	SPXV02.5TXS	07945822111
					50	SPXV02.5LXS	07945822112
SPXV	3	003.	SPXV003-S	SPXV 3-S	10	SPXV003.TXS	07945822113
					50	SPXV003.LXS	07945822114
SPXV	3.5	03.5	SPXV03.5-S	SPXV 3 ½-S	10	SPXV03.5TXS	07945822115
					50	SPXV03.5LXS	07945822116
SPXV	4	004.	SPXV004-S	SPXV 4-S	10	SPXV004.TXS	07945819882
					50	SPXV004.LXS	07945819884
SPXV	4.5	04.5	SPXV04.5-S	SPXV 4 ½-S	10	SPXV04.5TXS	07945828571
					50	SPXV04.5LXS	07945828572
SPXV	5	005.	SPXV005-S	SPXV 5-S	10	SPXV005.TXS	07945819886
					50	SPXV005.LXS	07945819888
SPXV	6	006.	SPXV006-S	SPXV 6-S	10	SPXV006.TXS	07945884279
					50	SPXV006.LXS	07945884278
SPXV	8	008.	SPXV008-S	SPXV 8-S	10	SPXV008.TXS	07945884281
					50	SPXV008.LXS	07945884280
SPXV	10	010.	SPXV010-S	SPXV 10-S	10	SPXV010.TXS	07945884283
					50	SPXV010.LXS	07945884282
SPXV	12	012.	SPXV012-S	SPXV 12-S	10	SPXV012.TXS	07945884285
					50	SPXV012.LXS	07945884284
SPXV	15	015.	SPXV015-S	SPXV 15-S	10	SPXV015.TXS	07945884287
					50	SPXV015.LXS	07945884286
SPXV	16	016.	SPXV016-S	SPXV 16-S	10	SPXV016.TXS	07945827710
					50	SPXV016.LXS	07945827708
SPXV	20	020.	SPXV020-S	SPXV 20-S	10	SPXV020.TXS	07945884289
					50	SPXV020.LXS	07945884288

POWR-GARD® Fuse

SPXV-S SERIES SOLAR FUSE

Electrical Specifications

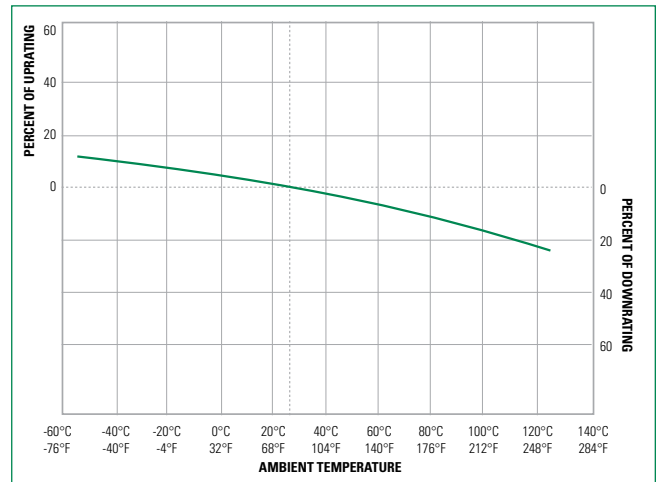
AMPERAGE	VOLTAGE	INTERRUPTING RATING	NOM COLD RESISTANCE (ohm)	WATTS LOSS AT 100% RATED CURRENT (W)	WATTS LOSS AT 80% RATED CURRENT (W)	MELTING I ² T (A ² S) (1500 V dc)	TOTAL CLEARING I ² T (A ² S) 15 kA (1500 V dc)	TOTAL CLEARING I ² T (A ² S) 30KA (1500 V DC)
	DC	DC						
1	1500	50 kA*	0.926	1.67	0.90	0.27	0.5	—
2	1500	50 kA*	0.289	2.17	1.10	1.35	3.2	—
2.25	1500	50 kA*	0.249	2.43	1.21	1.59	4.4	—
2.5	1500	50 kA*	0.223	2.90	1.40	3.68	5.8	—
3	1500	50 kA*	0.159	2.91	1.41	6	12	—
3.5	1500	50 kA*	0.124	2.95	1.47	10	19	16
4	1500	50 kA*	0.123	2.96	1.65	14	24	—
4.5	1500	50 kA*	0.102	2.81	1.61	34	55	—
5	1500	50 kA*	0.076	3.01	1.66	48	71	—
6	1500	50 kA*	0.058	3.05	1.71	49	75	—
8	1500	50 kA*	0.035	3.26	1.84	121	214	—
10	1500	50 kA*	0.022	3.25	1.82	407	509	—
12	1500	50 kA*	0.016	3.34	1.89	798	951	1154
15	1500	50 kA*	0.013	5.27	3.05	299	637	—
16	1500	50 kA*	0.013	5.32	3.08	404	666	—
20	1500	50 kA*	0.009	5.38	3.14	701	1464	1738

* Self-certified

Electrical Specification – Agency Requirements

AMPERAGE RATING	OPENING TIME (MINUTES)			
	100 % of Amperage Rating per UL	105 % of Amperage Rating per IEC	135 % of Amperage Rating per UL	200 % of Amperage Rating per UL
1–20	Temperature Stabilization	60 Min	60 Max	4 Max

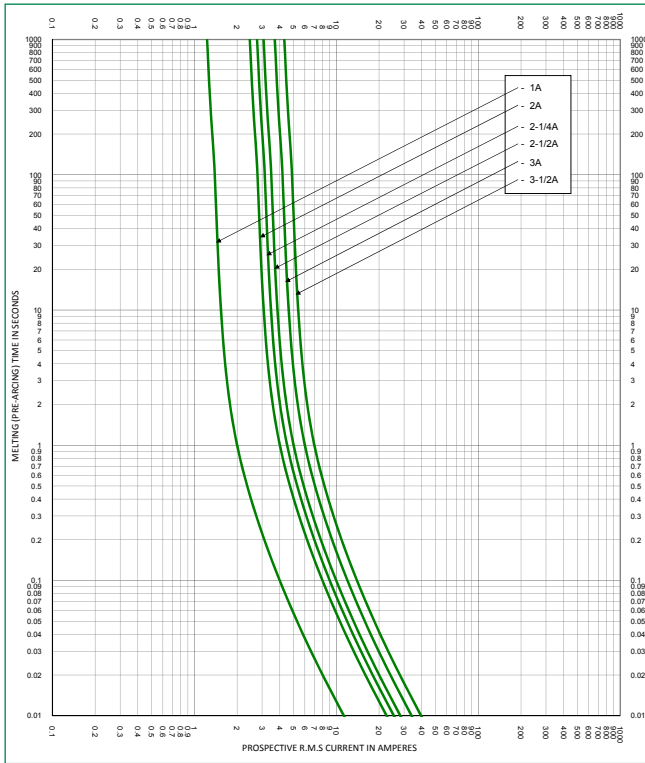
Temperature Derating Curve (Temperature of Air Immediately Surrounding Fuse)



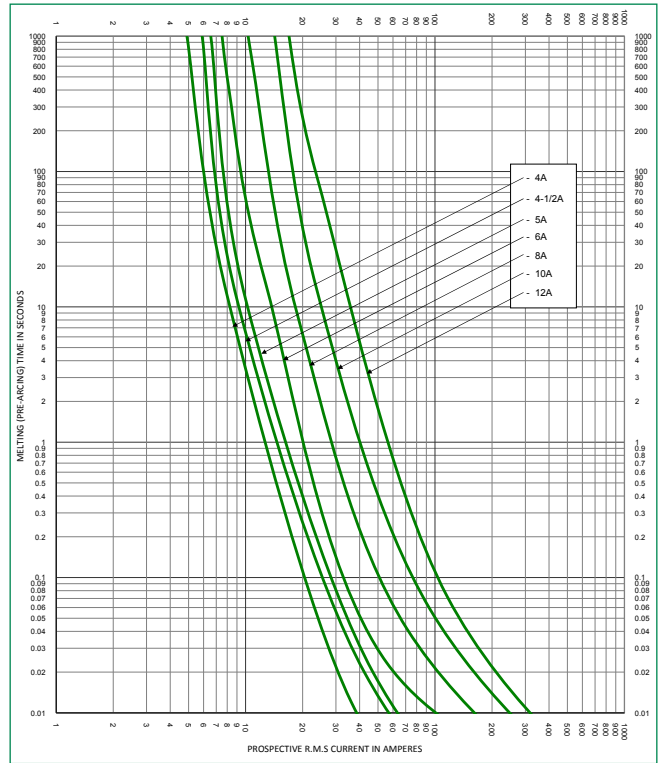
POWR-GARD® Fuse

SPXV-S SERIES SOLAR FUSE

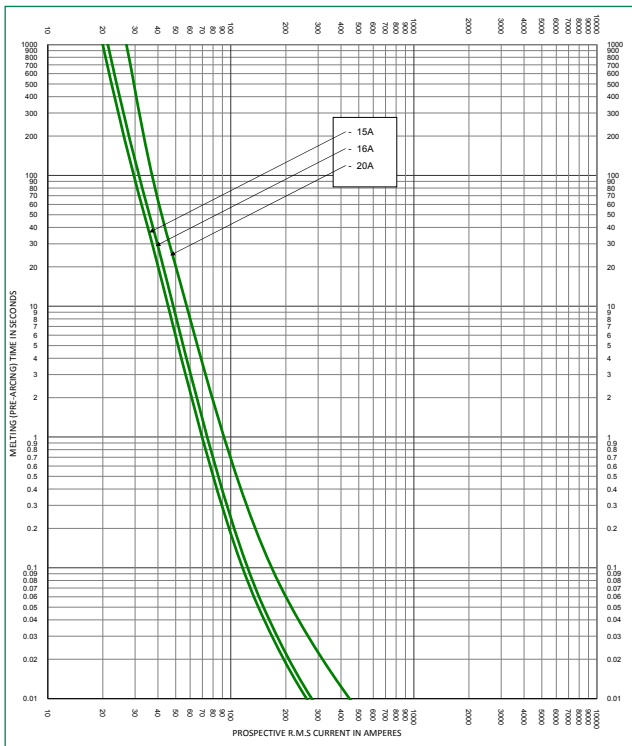
Time Current Curve (1–3.5 A)



Time Current Curve (4–12 A)



Time Current Curve (15–20 A)



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.