

SPXI SERIES IN-LINE SOLAR FUSE

1500 Vdc • 2.5-30 A



Description

The Littelfuse SPXI solar fuse is designed to integrate into an in-line assembly within a wire harness. The fuse provides photovoltaic (PV) protection that meets UL 248-19 for photovoltaic applications. The SPXI can be electrically insulated by either overmolding or using heat-shrink.

Features/Benefits

- UL 248-19 Recognized
- Meets IEC 60269-6 electrical performance requirements
- 30,000 A interrupting rating
- No fuse holder required

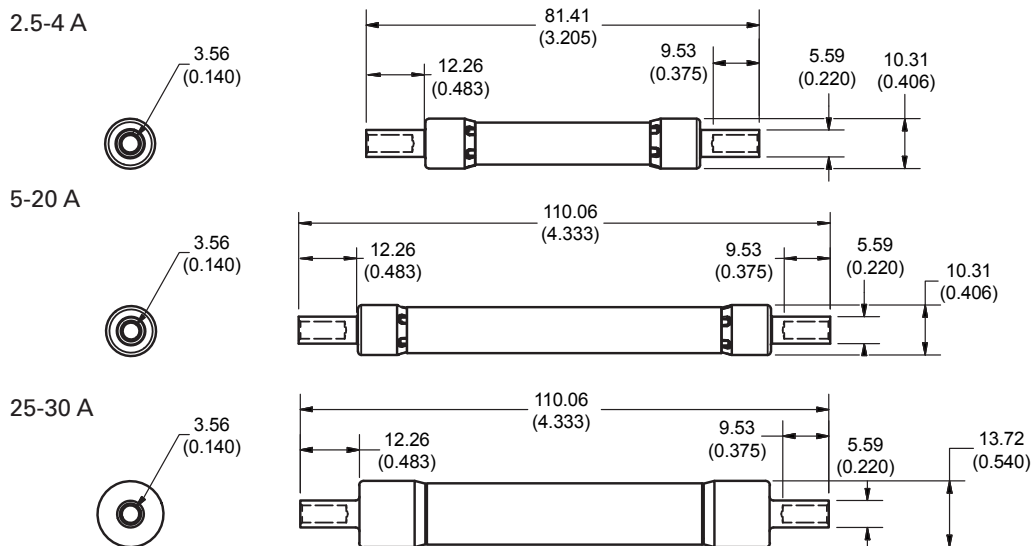
Applications

- Photovoltaic wire harness

Recommended Crimping Tool

T&B Sta-Kon ERG4002

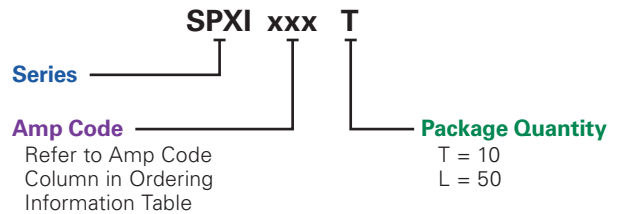
Dimensions mm (in)



Specifications

Voltage Rating	1500 Vdc
Amperage Rating	2.5, 3.5, 4, 5, 6, 8, 10, 12, 15, 20, 25, 30 A
Interrupting Ratings	15 kA (UL 248-19) 30 kA (Self-Certified)
Time Constant	≤ 1ms
Material	Body: Melamine Caps: Copper Alloy (Nickel Plated)
Approvals	UL 248-19 Recognized (File: E339112)
Environmental	RoHS Compliant REACH
Country of Origin	Mexico
US Patent	9,564,281

Part Numbering System



SERIES	AMP	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
SPXI	3.5	10	SPXI03.5	SPXI03.5T
SPXI	4	10	SPXI004	SPXI004.T
SPXI	20	50	SPXI020	SPXI020.L

Web Resources

Download additional technical information and view the complete solar portfolio: littelfuse.com/spxi

SPXI SERIES IN-LINE SOLAR FUSE

Ordering Information

SERIES	AMPERAGE	AMP CODE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC
SPXI	2.5	02.5	SPXI02.5	SPXI 2 ½ A	10	SPXI02.5T	07945880950
					50	SPXI02.5L	07945880949
SPXI	3.5	03.5	SPXI03.5	SPXI 3 ½ A	10	SPXI03.5T	07945880808
					50	SPXI03.5L	07945880149
SPXI	4	004.	SPXI004	SPXI 4 A	10	SPXI004.T	07945884508
					50	SPXI004.L	07945884509
SPXI	5	005.	SPXI005	SPXI 5A	10	SPXI005.T	07945823273
					50	SPXI005.L	07945823274
SPXI	6	006.	SPXI006	SPXI 6 A	10	SPXI006.T	07945882658
					50	SPXI006.L	07945882659
SPXI	8	008.	SPXI008	SPXI 8 A	10	SPXI008.T	07945882660
					50	SPXI008.L	07945882661
SPXI	10	010.	SPXI010	SPXI 10 A	10	SPXI010.T	07945882662
					50	SPXI010.L	07945882663
SPXI	12	012.	SPXI012	SPXI 12 A	10	SPXI012.T	07945882664
					50	SPXI012.L	07945882665
SPXI	15	015.	SPXI015	SPXI 15 A	10	SPXI015.T	07945882666
					50	SPXI015.L	07945882667
SPXI	20	020.	SPXI020	SPXI 20 A	10	SPXI020.T	07945882556
					50	SPXI020.L	07945882557
SPXI	25	025.	SPXI025	SPXI 25 A	10	SPXI025.T	07945883059
					50	SPXI025.L	07945883060
SPXI	30	030.	SPXI030	SPXI 30 A	10	SPXI030.T	07945883061
					50	SPXI030.L	07945883062

Electrical Specifications

AMPERAGE	VOLTAGE	INTERRUPTING RATING		WIRE RANGE CU Only (Solid/Stranded)	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) 15 kA (1500VDC)	TOTAL CLEARING I ² t (A ² s) 15 kA (1500VDC)
		AC	DC*						
2.5	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.099	0.86	0.48	7	16
3.5	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0711	1.56	0.81	25	50
4	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0438	0.95	0.54	57	95
5	1500	–	30kA	10-12 AWG (6-4 mm ²)	0.0760	3.01	1.66	48	71
6	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0576	3.05	1.71	49	75
8	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0349	3.26	1.84	121	214
10	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0223	3.25	1.82	407	509
12	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0163	3.34	1.89	798	951
15	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0131	5.27	3.05	299	637
20	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0085	5.38	3.14	701	1464
25	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0066	6.28	3.55	2209	2548
30	1500	–	30 kA	10-12 AWG (6-4 mm ²)	0.0055	7.60	4.25	3561	4010

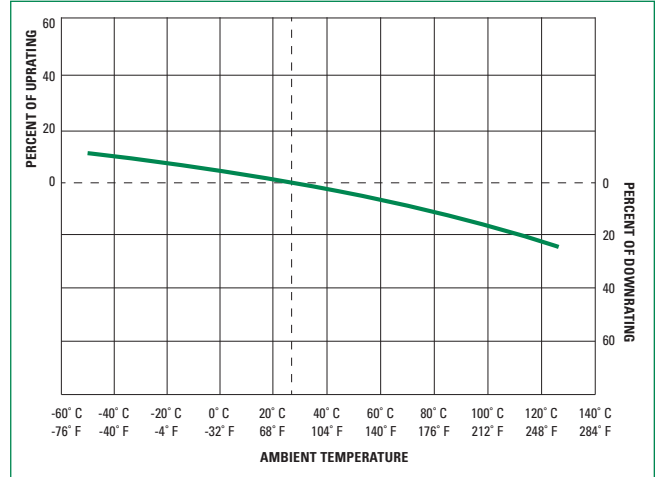
* 15 kA per UL 248-19

SPXI SERIES IN-LINE SOLAR FUSE

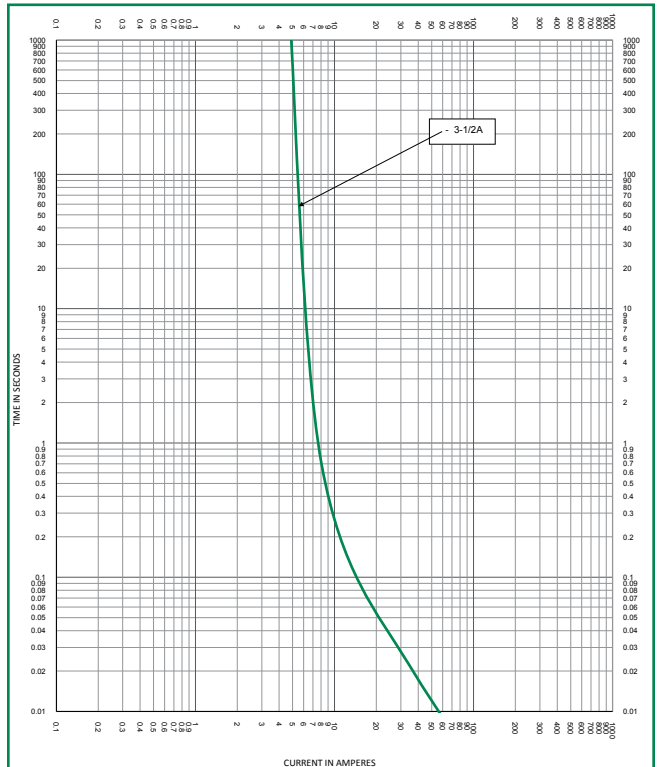
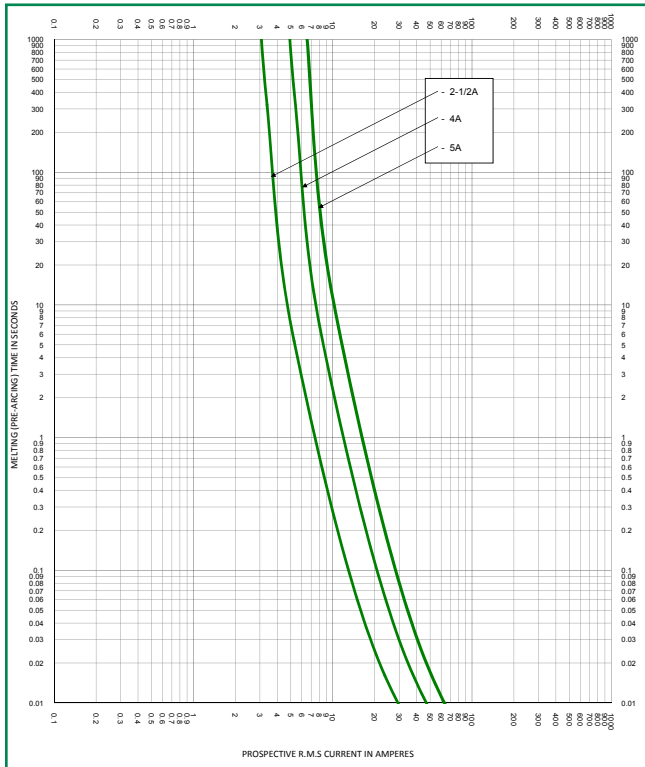
Electrical Specification — Agency Requirements

AMPERAGE RATING	OPENING TIME (MINUTES)				
	100% of Amp Rating per UL	113% of Amp Rating per IEC	135% of Amp Rating per UL	145% of Amp Rating per IEC	200% of Amp Rating per UL
2.5-30	Temperature Stabilization	60 Min	60 Max	60 Max	4 Max

Temperature Derating Curve (Temperature of Air Immediately Surrounding Fuse)

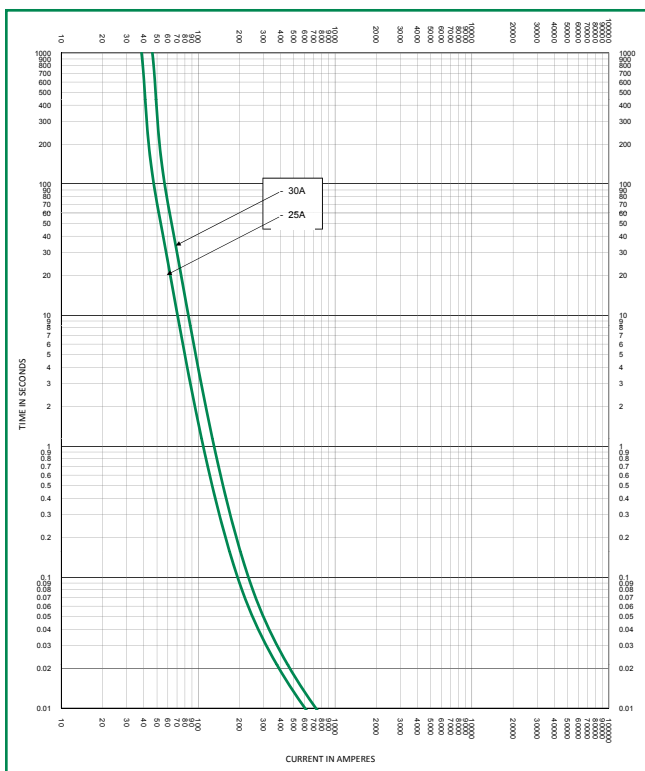
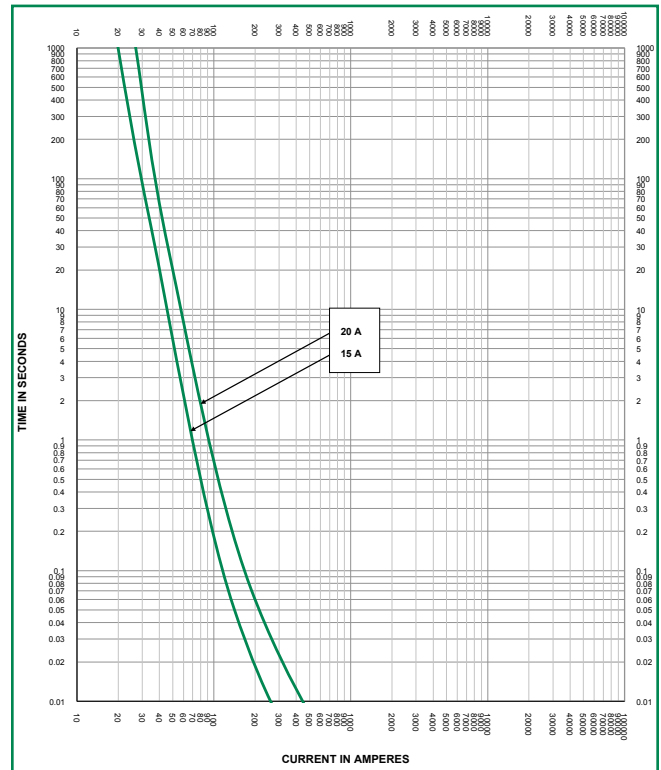
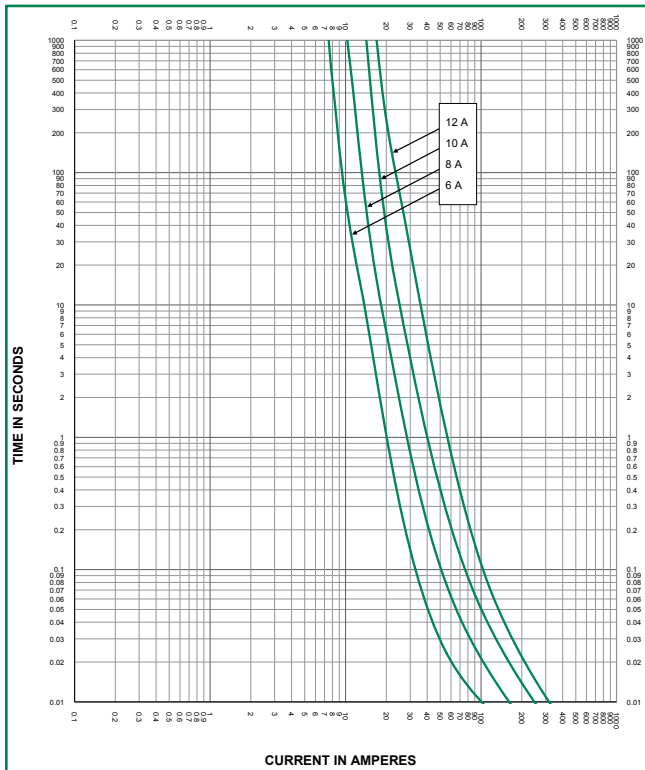


Time Current Curves



SPXI SERIES IN-LINE SOLAR FUSE

Time Current Curves



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.