

SPXI SERIES IN-LINE SOLAR FUSE

1500 Vdc • 2.5-30 A (Patent Pending)



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

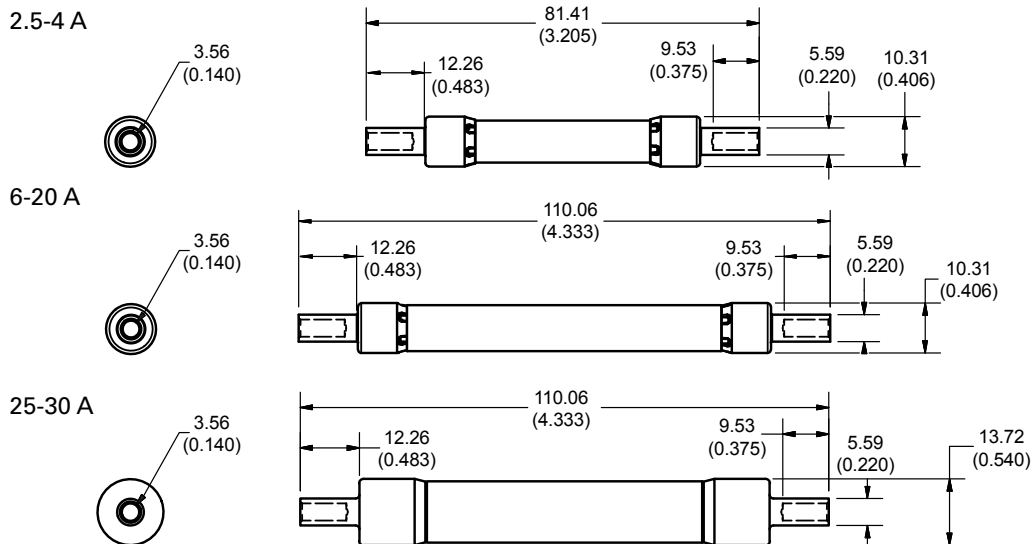
Applications

- Photovoltaic wire harness

Recommended Crimping Tool

T&B Sta-Kon ERG4002

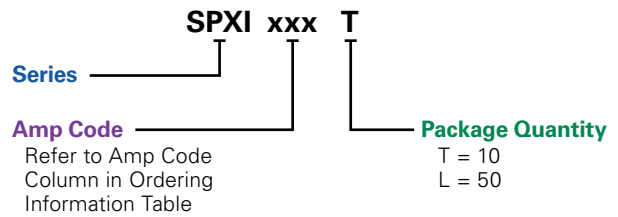
Dimensions mm (in)



Specifications

Voltage Rating	1500 Vdc
Amperage Rating	2.5, 3.5, 4, 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

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	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
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

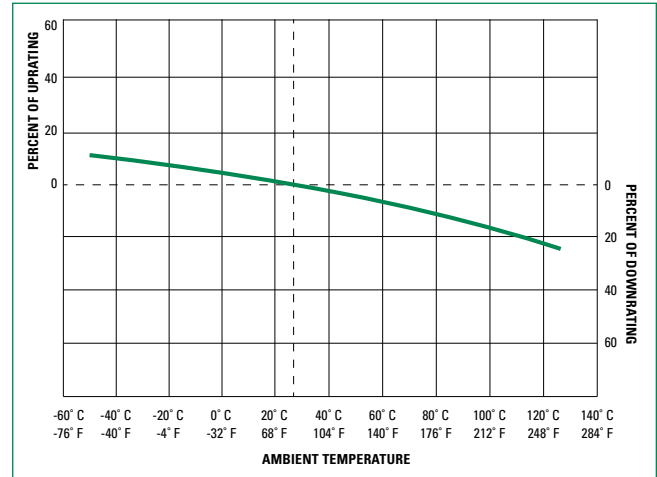
* 15 kA per UL 248-19

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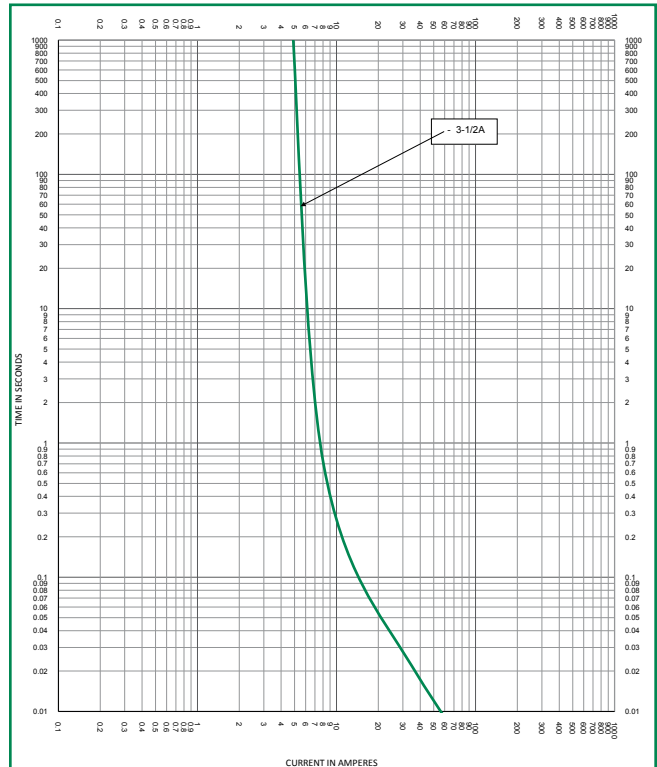
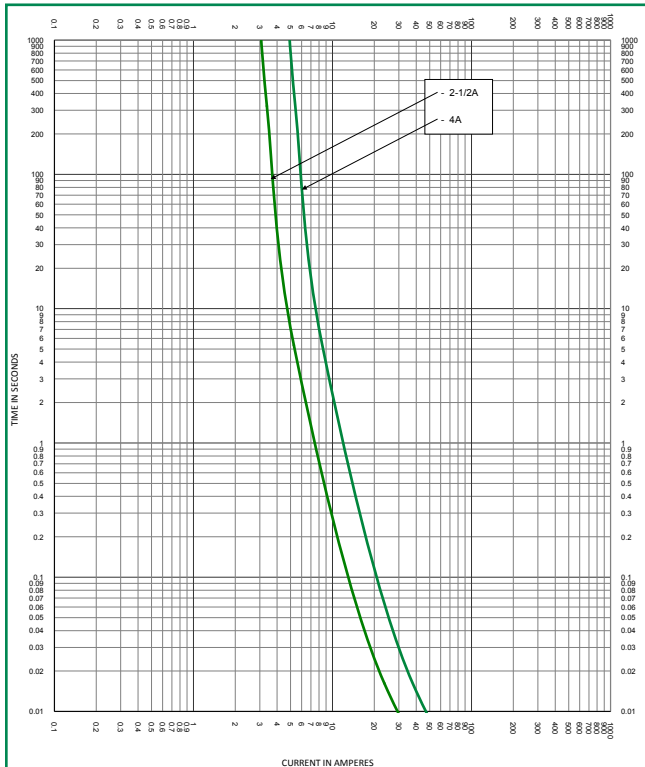
Electrical Specification — Agency Requirements

AMPERE 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



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