

SPFI SERIES IN-LINE SOLAR FUSE

1000 Vdc • 2-20 A
Patent Pending



Description

The Littelfuse SPFI solar fuse has been designed to integrate into an in-line assembly within a wire harness. The fuse provides photovoltaic (PV) protection is UL 2579 Recognized for photovoltaic applications. The SPFI can be electrically insulated by either overmolding or using approved heat-shrink.

Features/Benefits

- Meets UL photovoltaic specifications
- Meets IEC 60269-6 electrical performance requirements
- 20,000 A interrupting rating
- No fuseholder required

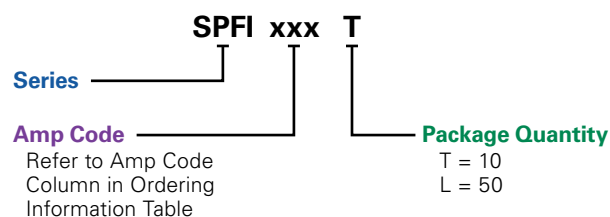
Applications

- Photovoltaic wire harness

Specifications

Voltage Rating:	1000 Vdc
Amperage Rating:	2, 3, 3.5, 4, 5, 6, 8, 10, 12, 15, 20
Max. Interrupting Rating:	20 kA
Time Constant	≤ 1ms
Material:	Body: Melamine Caps: Copper Alloy (Nickel Plated)
Approvals:	UL 2579 Recognized (File: E339112)
Environmental:	RoHS Compliant
Country of Origin:	Mexico

Part Numbering System



SERIES	AMP	PACKAGE QUANTITY	CATALOG NUMBER	ORDERING NUMBER
SPFI	2	10	SPFI002	SPFI002.T
SPFI	3.5	10	SPFI03.5	SPFI03.5T
SPFI	20	50	SPFI020	SPFI020.L

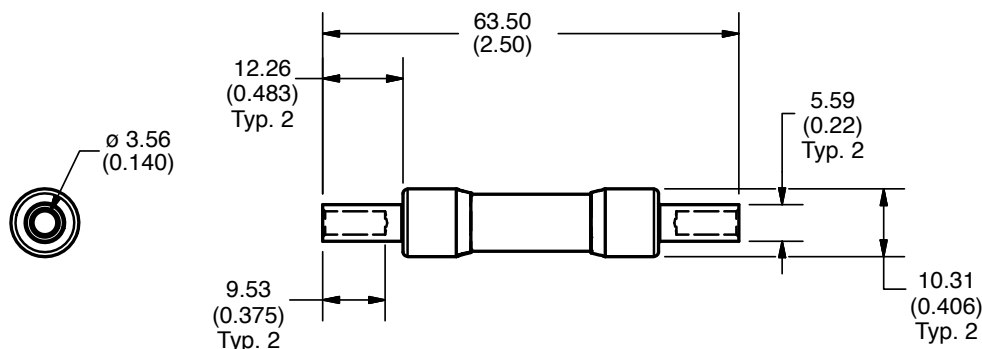
Web Resources

Downloadable CAD drawings and other technical information:
Littelfuse.com/spfi

Recommended Crimping Tool

T&B Sta-Kon ERG4002 or equivalent

Dimensions mm (in)



Look for this logo to indicate products that are used in solar applications. Visit our website **Littelfuse.com/solar** for the latest updates on approvals, certifications, and new products.

SPFI SERIES IN-LINE SOLAR FUSE

Ordering Information

AMPERAGE	AMP CODE	CATALOG NUMBER	PRODUCT MARKING	PACK QUANTITY	ORDERING NUMBER	UPC
2	002.	SPFI002	SPFI 2	10	SPFI002.T	07945880898
				50	SPFI002.L	07945880899
3	003.	SPFI003	SPFI 3	10	SPFI003.T	07945880853
				50	SPFI003.L	07945880854
3.5	03.5	SPFI03.5	SPFI 3 ½	10	SPFI03.5T	07945879544
				50	SPFI03.5L	07945879545
4	004.	SPFI004	SPFI 4	10	SPFI004.T	07945880900
				50	SPFI004.L	07945880901
5	005.	SPFI005	SPFI 5	10	SPFI005.T	07945880902
				50	SPFI005.L	07945880903
6	006.	SPFI006	SPFI 6	10	SPFI006.T	07945880855
				50	SPFI006.L	07945880856
8	008.	SPFI008	SPFI 8	10	SPFI008.T	07945880857
				50	SPFI008.L	07945880858
10	010.	SPFI010	SPFI 10	10	SPFI010.T	07945880859
				50	SPFI010.L	07945880860
12	012.	SPFI012	SPFI 12	10	SPFI012.T	07945880861
				50	SPFI012.L	07945880862
15	015.	SPFI015	SPFI 15	10	SPFI015.T	07945880863
				50	SPFI015.L	07945880864
20	020.	SPFI020	SPFI 20	10	SPFI020.T	07945880865
				50	SPFI020.L	07945880866

Electrical Specifications

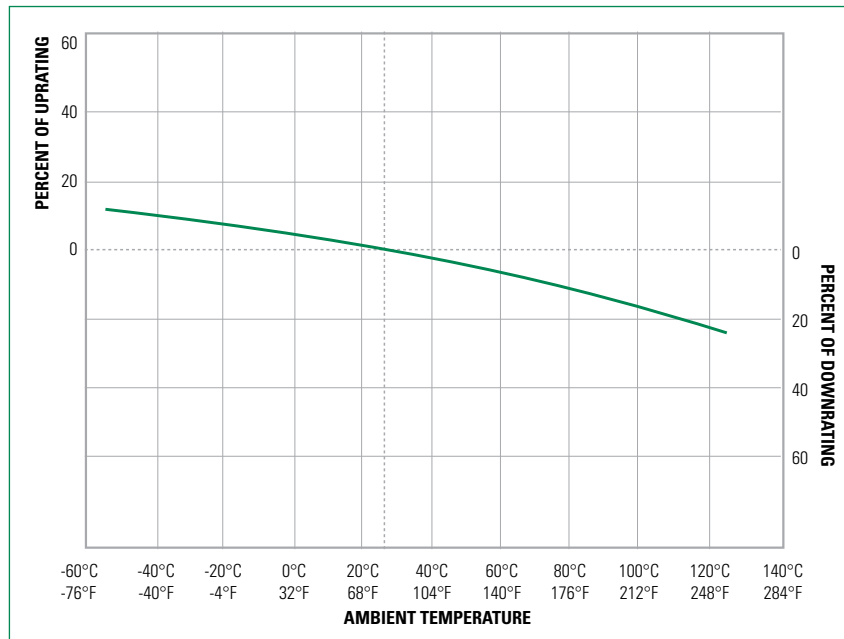
AMPERAGE	VOLTAGE	INTERRUPTING RATING		WIRE RANGE	NOM COLD RESISTANCE (ohm)	WATTS LOSS AT 100% RATED CURRENT (W)	WATTS LOSS AT 80% RATED CURRENT (W)	TOTAL CLEARING I ² t (A ² s) 10 kA	TOTAL CLEARING I ² t (A ² s) 20 kA	AGENCY APPROVALS
		AC	DC							UL RECOGNIZED
2	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.237	1.586	0.851	1.175	4.755	•
3	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.11	1.504	0.824	5.007	7.882	•
3.5	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.07787	1.365	0.778	11.297	11.297	•
4	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.06127	1.491	0.839	23.031	23.031	•
5	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.04086	1.465	0.859	42.600	42.600	•
6	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.0281	1.348	0.769	76.270	80.254	•
8	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.0178	1.610	0.914	193.323	198.960	•
10	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.0125	1.760	1.000	395.556	401.208	•
12	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.00993	1.965	1.109	599.198	641.940	•
15	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.00799	2.282	1.382	457.740	504.770	•
20	1000	—	20 kA	10-12 AWG (6-4 mm ²)	0.0045	2.810	1.574	1173.990	1312.850	•

Electrical Specification – Agency Requirements

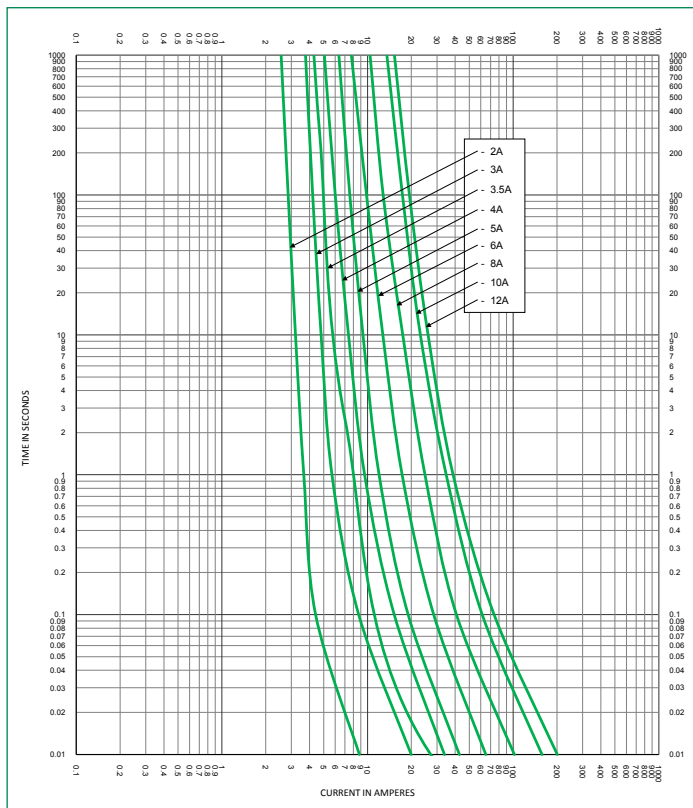
AMPERAGE RATING	OPENING TIME (MINUTES)		
	100% of Amp Rating per UL	135% of Amp Rating per UL	200% of Amp Rating per UL
2-20	Temperature Stabilization	60 Max	4 Max

SPFI SERIES IN-LINE SOLAR FUSE

Temperature Derating Curve (Temperature of Air Immediately Surrounding Fuse)



Time Current Curve (2-12 A)



Time Current Curve (15-20 A)

