

Fibre Core Conformal Coated Wirewound Resistor

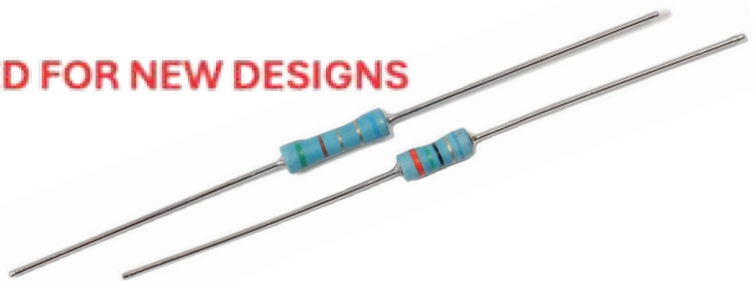


SPP Series

NOT RECOMMENDED FOR NEW DESIGNS

Features

- UL1412 recognised fusing *
- Coated or uncoated units
- Positive high TC's upon request
- Colorband standard identification
- Lower ranges available - contact factory
- Weldable and solderable magnetic leads



* UL file number E234469



All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

	SPP-1	SPP-2	SPP-3
IRC Type	SPP-1	SPP-2	SPP-3
Resistance - Std.	0.1Ω to 1200Ω 0.1Ω to 1200Ω	0.1Ω to 2400Ω 0.1Ω to 2400Ω	0.1Ω to 2400Ω 0.1Ω to 2400Ω
Recognised Range	1Ω to 470Ω 1Ω to 470Ω	1Ω to 470Ω 1Ω to 470Ω	---
Tolerance - Std.	±5% (E24), ±10% (E12) ±5% (E24), ±10% (E12)		
Power Rating	1W @ 85°C 1 watt @ 85°C	2W @ 85°C 2 watt @ 85°C	3W ² @ 85°C 3 watt @ 85°C
Load Life Stability	3/4 watt @ 105°C 3/4 watt @ 105°C ± 10%	2 watt @ 140°C 2 watt @ 140°C ± 10%	3 watt @ 85°C ± 10% 3 watt @ 85°C ± 10%
Max. Continuous Working Voltage	1/2 watt @ 125°C Derating to 0 @ 160°C √PR	---	75V 1 watt @ 110°C ---
Min. Insulation Resistance	Dry 10,000 Meg 1 watt @ 85°C ± 10%	10,000 Meg 2 watt @ 85°C ± 10%	10,000 Meg 3 watt @ 85°C ± 10%
Min. Dielectric Withstanding Volts (RMS)	600V	600V	600V
Current Noise	√PR Negligible	√PR Negligible	√PR Negligible
Temperature Coefficient	Dry 10,000 Meg Wet 100 Meg ±300ppm/°C 1Ω - 1200Ω	±600ppm/°C 0.10Ω - 0.91Ω 10 - 2400Ω	±600ppm/°C 0.10Ω - 0.91Ω 10 - 2400Ω
Ambient Temperature Range	-65 to 160°C		

Notes:

1. Unless specified otherwise, standard test centers are 1/4 inches.

2. For dissipating high power forced air cooling must be provided to restrict the maximum body temperature to 180°C.

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.

All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

BI Technologies IRC Welwyn

www.ttelectronics.com/resistors

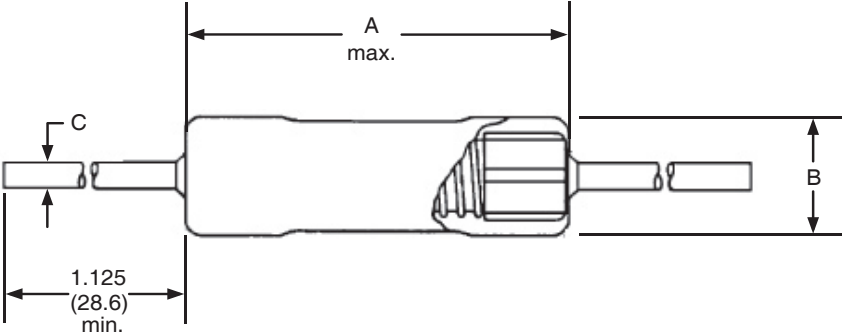
Fibre Core Conformal Coated Wirewound Resistor

SPP Series **NOT RECOMMENDED FOR NEW DESIGNS**

Environmental Data

Characteristics	Maximum Limits
Thermal Shock	±5%
Low Temperature Operation	±5%
Short Time Overload	±5%
Commercial Short Time Overload	±5%
Resistance to Solder Immersion	±3%
Solderability	95% minimum coverage
Moisture Resistance	±5%
Life Test	±5%
Test Method	EIA Specification RS-344

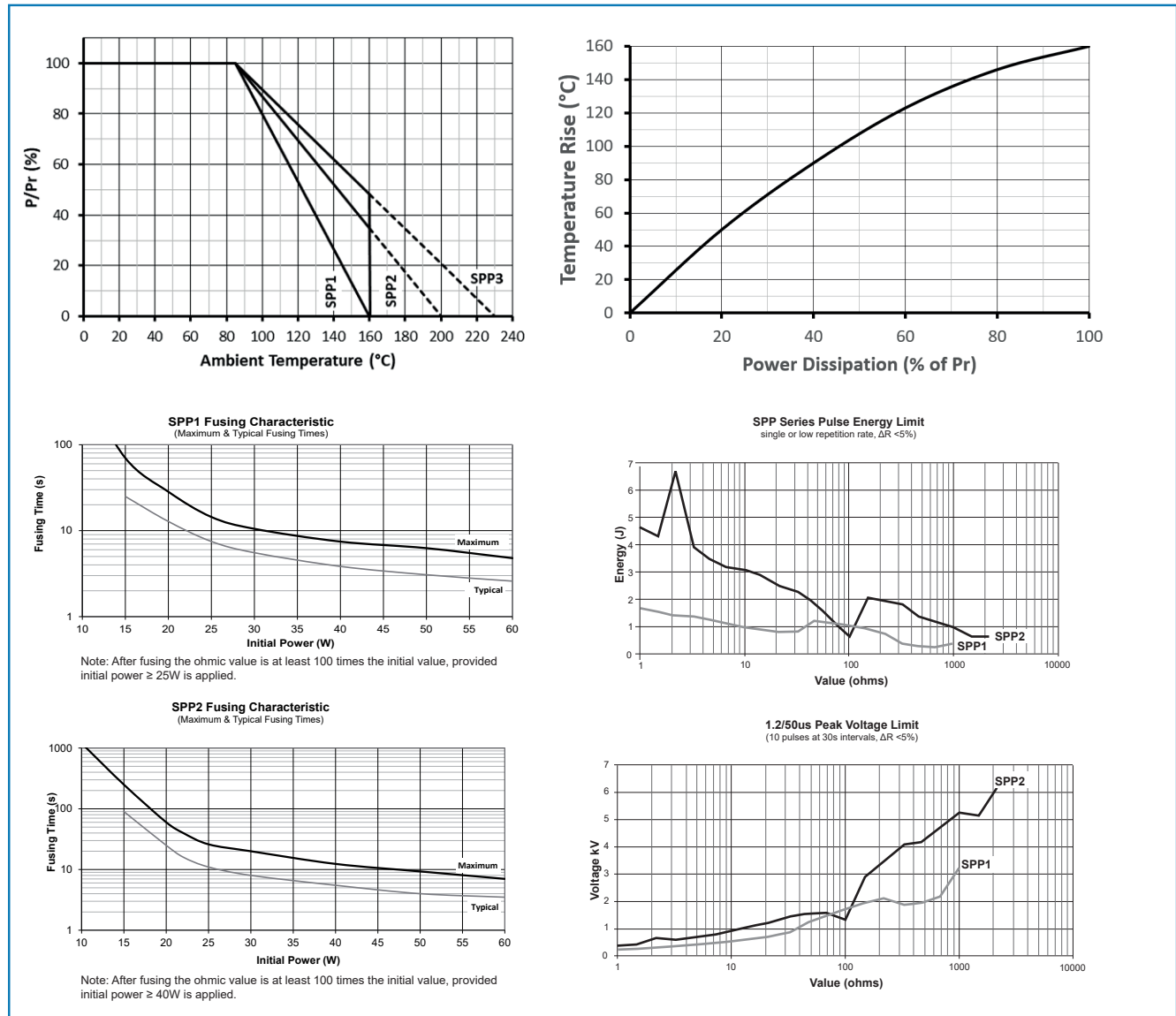
Physical Data

			
Dimensions (Inches and (mm))			
IRC Type	A	B	C ± .002(0.05)
SPP-1	0.400(10.2) max.	0.148(3.8) max.	0.032(0.8)
SPP-2	0.570(14.5) max.	0.170(4.3) max.	0.032(0.8)
SPP-3	0.570(14.5) max	0.170(4.3) max.	0.032(0.8)

Marking

SPP is marked with five colour bands. Two indicate value followed by one for the multiplier, one tolerance band, and a blue band indicating flameproof fusible.

Fibre Core Conformal Coated Wirewound Resistor



General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
 All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Fibre Core Conformal Coated Wirewound Resistor

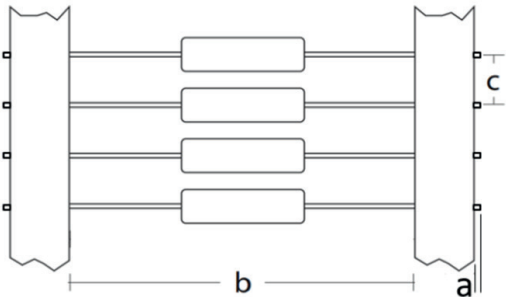
SPP Series

NOT RECOMMENDED FOR NEW DESIGNS

Packaging

Resistors are supplied taped and reeled (see Ordering Procedure for reel quantities.) The taping dimensions are shown below.

Taping dimensions, inches (mm)			
Type	a max	b	c
SPP-1, SPP-2, SPP-3	0.41 (10.4)	2.062±0.062 (52.4±1.6)	0.2±0.015 (5.1±0.4)



Ordering Procedure

Example: SPP1UL4700JLF (SPP1, UL recognised, 470 ohms ±5%, Pb-free)

S	P	P	1	U	L	4	7	0	0	J	L	F		
1				2		3			4	5		6		

1	2	3	4	5	6
Type	UL Status	Value	Tolerance	Packing & Termination Finish	Custom Code
SPP1	UL = UL recognised	3 digits + multiplier	J = ±5%	Omit for SnPb	Optional
SPP2	(SPP1 & SPP2 only,	R = ohms for values	K = ±10%	LF = Pb-free	
SPP3	see Electrical Data for applicable values.)	<100 ohms		Standard packing is tape & reel, 4000/reel	

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

BI Technologies IRC Welwyn