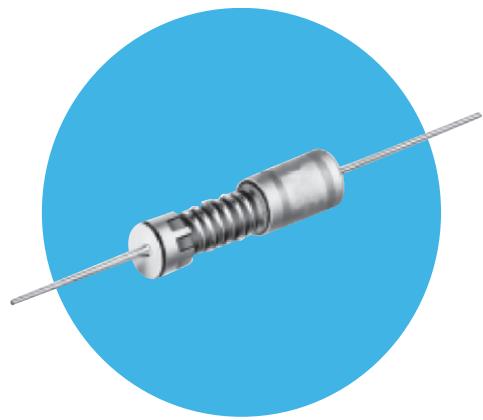


Resistors



TT Electronics

Fibre Core Conformal Coated Wirewound Resistor



SPP Series

- UL1412 recognised fusing *
- Coated or uncoated units
- Positive high TC's upon request
- Color band 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 (RoHS2)

Electrical Data

IRC Type	SPP-1		SPP-2		SPP-3	
Resistance - Std.	0.1Ω to 1200Ω		0.1Ω to 2400Ω		0.1Ω to 2400Ω	
UL Recognised Range	1 Ω to 470 Ω		1 Ω to 470 Ω		---	
Tolerance - Std.	±5% (E24), ±10% (E12)					
Power Rating	1 watt @ 85°C 3/4 watt @ 105°C 1/2 watt @ 125°C Derating to 0 @ 160°C		2 watt @ 85°C 1 watt @ 140°C --- ---		3 watt @ 85°C 2 watt @ 145°C 1 watt @ 190°C ---	
Load Life Stability	1 watt @ 85°C ± 10%		2 watt @ 85°C ± 10%		3 watt @ 85°C ± 10%	
Max. Continuous Working Voltage	\sqrt{PR}		\sqrt{PR}		\sqrt{PR}	
Min. Insulation Resistance	Dry	10,000 Meg	10,000 Meg		10,000 Meg	
	Wet	100 Meg	100 Meg		100 Meg	
Min. Dielectric Withstanding Volts (RMS)	600V		600V		600V	
Current Noise	Negligible		Negligible		Negligible	
Temperature Rise at Rated Load, 25°C Ambient	Approx. 150°C		Approx. 200°C		Approx. 225°C	
Temperature Coefficient	±600/°C 0.10Ω - 0.91Ω	±300/°C 1Ω - 1200Ω	±600/°C 0.10Ω - 0.91Ω	±300/°C 1Ω - 2400Ω	±600/°C 0.10Ω - 0.91Ω	±300/°C 1Ω - 2400Ω

Notes:

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

General Note

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

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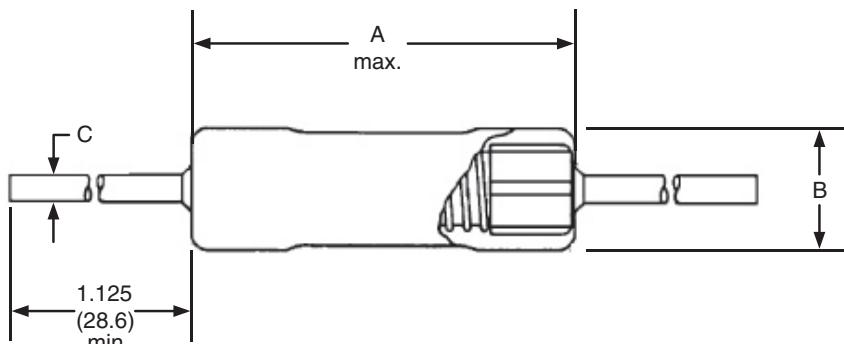
Fibre Core Conformal Wirewound Resistor

SPP Series

Environmental Data

Characteristics	Maximum Limits		
Temperature Coefficient (ppm/°C)	SPP-1	±600/°C	0.10Ω - 0.91Ω
	SPP-2	±600/°C	1.0Ω - 1200Ω
	SPP-3	±600/°C	1.0Ω - 2400Ω
Thermal Shock	±5%		
Low Shock	±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)

General Note

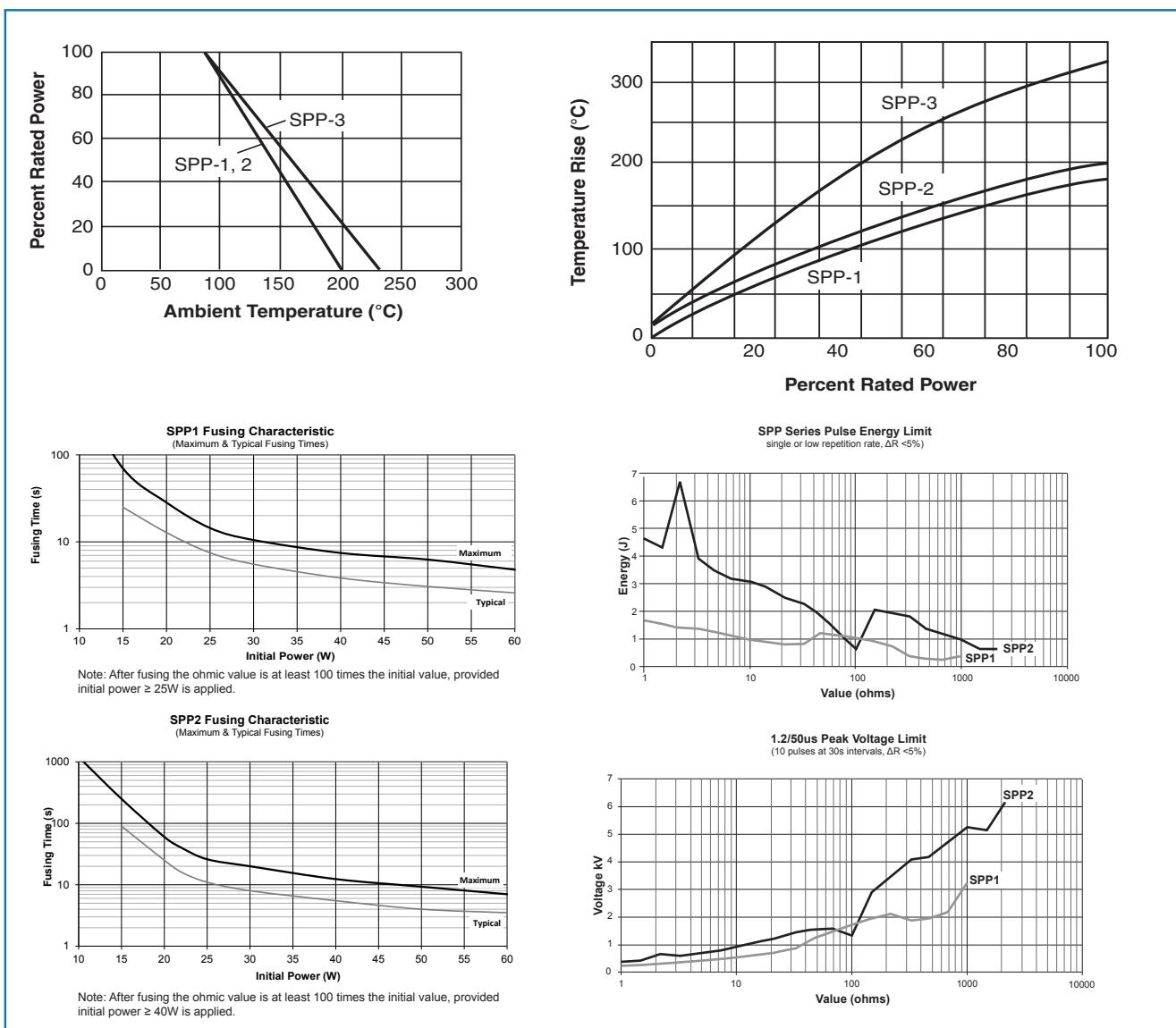
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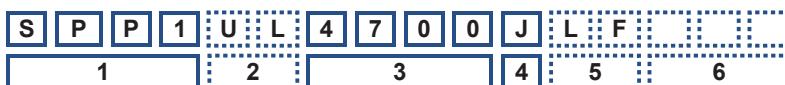
Fibre Core Conformal Wirewound Resistor

SPP Series



Ordering Procedure

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



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

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