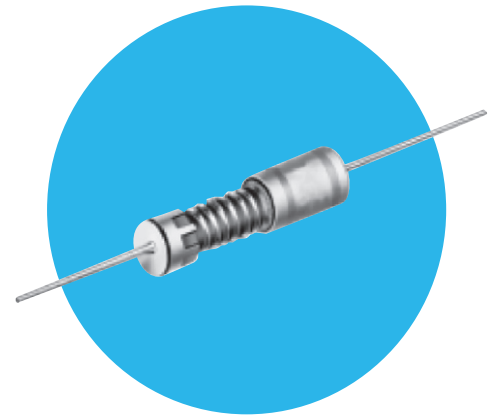


Fibre Core Conformal Coated Wirewound Resistor

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

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 Wet | 10,000 Meg 100 Meg | 10,000 Meg 100 Meg | 10,000 Meg 100 Meg | 10,000 Meg 100 Meg | 10,000 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 3/4 inches.

General Note

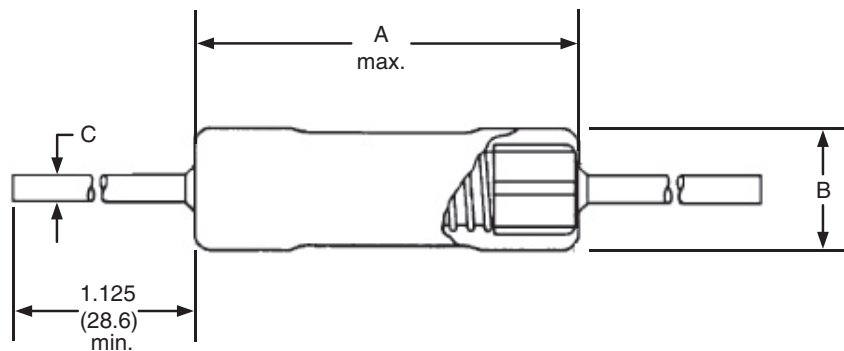
TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

SPP Series

Environmental Data

| Characteristics | Maximum Limits | |
|----------------------------------|--------------------------|---|
| Temperature Coefficient (ppm/°C) | SPP-1 | ±600/°C 0.10Ω - 0.91Ω ±300/°C 1.0Ω - 1200Ω |
| | SPP-2 | ±600/°C 0.10Ω - 0.91Ω ±300/°C 1.0Ω - 2400Ω |
| | SPP-3 | ±600/°C 0.10Ω - 0.91Ω ±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



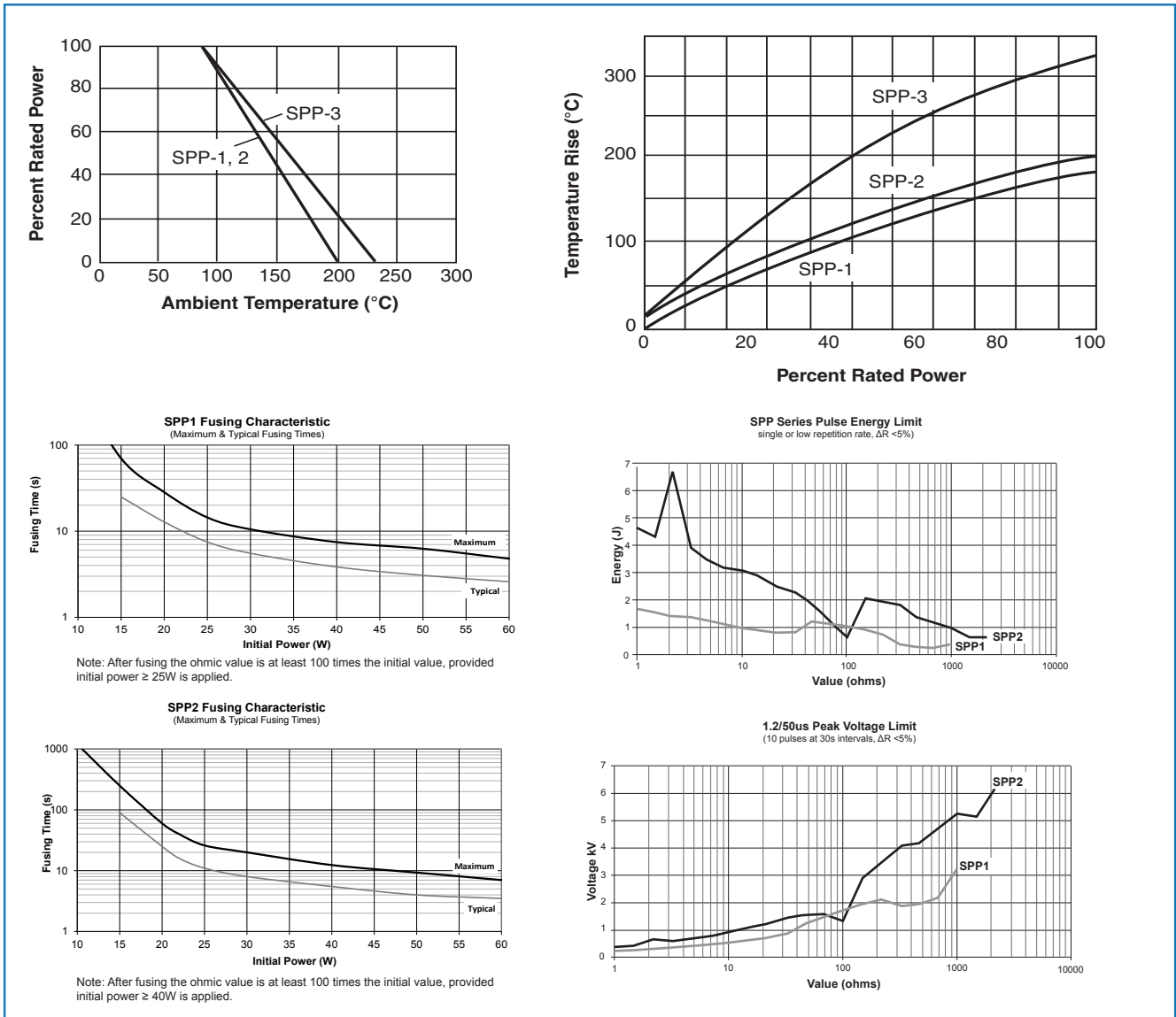
Dimensions (Inches and (mm))

| 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

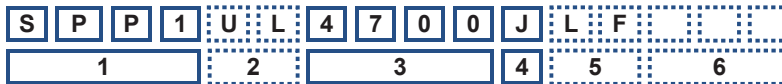
TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

SPP Series



Ordering Procedure

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



| 1 | 2 | 3 | 4 | 5 | 6 |
|------|--|-------------------------------|----------------|--|-------------|
| Type | UL Status | Value | Tolerance | Packing & Termination Finish | 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 | |

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.