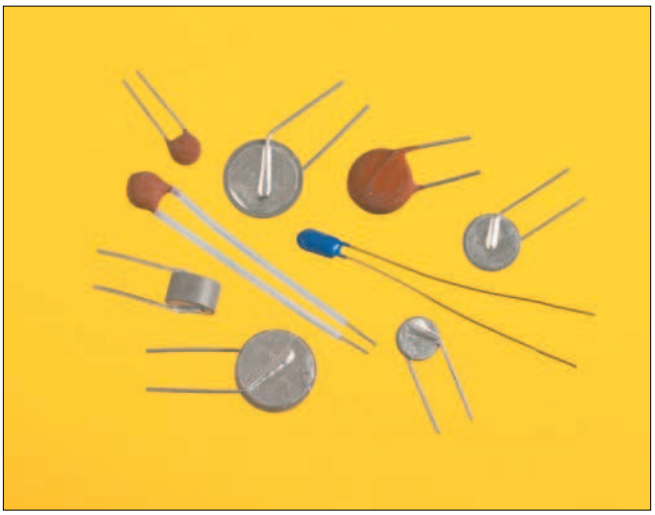
# Over-Current Protectors

SPECTRUM SENSORS & CONTROLS, INC.
A Spectrum Control Business

Positive Temperature Coefficient thermistors are used in a wide variety of applications to protect sensitive components against Over-Current conditions. The PTC is unique in its ability to limit excess current during fault conditions, and then automatically reset to a normal operating mode when the fault is removed. Select a part from our Standard Over-Current Protectors or contact SS&C engineering to design a PTC to meet your specific application requirements.



*Over-Current Protectors*

### Features:

- Fast Switching
- No Electrical Noise
- Virtually Unlimited Life
- Self Resetting
- No Contacts
- Automatic Operation
- Efficient

### Typical Applications:

- Telephone Line Fault Protection
- Transformer Protection
- FHP Motor Protection
- Transistor Protection
- Speaker Protection

**SS&C Standard Over-Current Protectors**

| $V_{max}$ | $R_{25}$ | $I_{ns}$ | $I_{ms}$ | H | δ | $D_{max}$ | Wire Diameter | | SS&C Part Number |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Voltage | Resistance at 25˚C (±20%) | Maximum No Switch Current | Minimum Must Switch Current | Heat Capacity | Dissipation Factor | Maximum Diameter | | | |
| (volts) | Ω | (Amps) | (Amps) | Watt-sec ˚C | mW/˚C | (in.) | (in.) | AWG# | |
| 15 | 0.8 | 0.89 | 1.58 | 0.57 | 15 | .650 | .025 | 22 | P6004A120X100F |
| | 1.0 | 0.77 | 1.37 | 0.48 | 14 | .600 | .025 | 22 | P5504A120X100F |
| | 2.0 | 0.46 | 0.82 | 0.25 | 10 | .450 | .025 | 22 | P4004A120X200F |
| 50 | 5 | 0.36 | 0.63 | 0.85 | 15 | .650 | .025 | 22 | P6006C120X500F |
| | 10 | 0.21 | 0.37 | 0.38 | 10 | .450 | .025 | 22 | P4006C120X101F |
| | 20 | 0.13 | 0.23 | 0.21 | 8 | .350 | .025 | 22 | P3006C120X201F |
| 132 | 7 | 0.31 | 0.55 | 1.41 | 16 | .650 | .025 | 22 | P6010D120X700F |
| | 10 | 0.25 | 0.45 | 1.19 | 15 | .600 | .025 | 22 | P5510D120X101F |
| | 25 | 0.13 | 0.23 | 0.48 | 10 | .400 | .025 | 22 | P3510D120X251F |
| | 50 | 0.08 | 0.15 | 0.25 | 8 | .300 | .020 | 24 | P2510D120X501F |
| | 100 | 0.05 | 0.10 | 0.16 | 7 | .250 | .020 | 24 | P2010D120X102F |
| 265 | 25 | 0.14 | 0.25 | 0.94 | 12 | .450 | .025 | 22 | P4015E120X251F |
| | 50 | 0.09 | 0.16 | 0.53 | 9 | .350 | .025 | 22 | P3015E120X501F |
| | 100 | 0.06 | 0.10 | 0.24 | 8 | .250 | .020 | 24 | P2015E120X102F |
| 400 | 50 | 0.10 | 0.18 | 0.96 | 12 | .400 | .025 | 22 | P3520F120X501F |
| | 100 | 0.06 | 0.11 | 0.49 | 9 | .300 | .020 | 24 | P2520F120X102F |

NOTES

1. Maximum Voltage listed as DC or 60 Hz. AC.
2. Maximum No Switch Current ($I_{ns}$) is the maximum current that the PTC can pass without switching into its high resistance state.
3. Minimum Must Switch Current ($I_{ms}$) is the minimum current that is necessary to switch the PTC into its high resistance state.
4. $I_{ns}$ is calculated at the maximum ambient temperature, while $I_{ms}$ is determined at the minimum ambient temperature. For SS&C standard products, $Ta_{min}$ is 0˚C and $Ta_{max}$ is 50˚C.



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