

Over-Current Protectors

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.

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



Over-Current Protectors

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	(in.)	AWG#	
(volts)	Ω	(Amps)	(Amps)	Watt-sec °C	mW/°C	(in.)	(in.)		
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, $T_{a_{min}}$ is 0°C and $T_{a_{max}}$ is 50°C.