

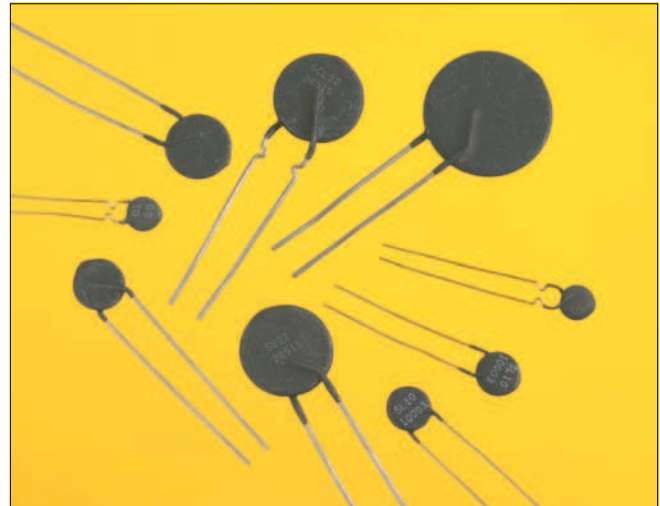
Surge Current Limiters

Description:

SS&C Surge Current Limiters are a cost-effective way of limiting the inrush of current that can damage components in switching power supplies or other electronic devices.

These specially formulated NTC Thermistors have an initial high resistance that can limit current surge for up to several seconds. During this time, the heat generated within the device causes the resistance to decrease to a very low level. The resulting voltage drop across the Surge Current Limiter is negligible.

Surge Current Limiters are available in standard configurations, with a wide range of resistance and current carrying capabilities to fit your needs. They also can be custom designed to meet a variety of resistance, tolerance, size, lead configuration, and custom package specifications.



Surge Current Limiters

| SS&C Surge Current Limiters | | | | | | | | | |
|-----------------------------|----------|----------------------------------|--|-----------------------------|----------|------------------------------|----------|---------------|----------|
| Type Number | R@25 (Ω) | Maximum Steady Current (Amperes) | Resistance @ Max Steady State Current (Ohms) | "D" Maximum Coated Diameter | | "T" Maximum Coated Thickness | | Lead Diameter | |
| | | | | (mm) | (inches) | (mm) | (inches) | (mm) | (inches) |
| SCL32 0R530 | 0.5 | 30 | 0.01 | 32.00 | 1.260 | 8 | 0.327 | 1.0 | 0.040 |
| SCL22 0R712 | 0.7 | 12 | 0.02 | 22.00 | 0.866 | 6 | 0.245 | 1.0 | 0.040 |
| SCL22 1R520 | 1.5 | 20 | 0.02 | 22.00 | 0.866 | 6 | 0.245 | 1.0 | 0.040 |
| SCL32 1R030 | 1 | 30 | 0.02 | 32.00 | 1.260 | 6 | 0.245 | 1.0 | 0.040 |
| SCL10 1R308 | 1.3 | 8 | 0.05 | 9.50 | 0.374 | 5 | 0.204 | 0.8 | 0.032 |
| SCL22 2R018 | 2 | 18 | 0.03 | 22.00 | 0.866 | 6 | 0.245 | 1.0 | 0.040 |
| SCL15 2R508 | 2.5 | 8 | 0.07 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL15 2R509 | 2.5 | 9 | 0.04 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL22 2R515 | 2.5 | 15 | 0.03 | 22.00 | 0.866 | 6 | 0.245 | 1.0 | 0.040 |
| SCL15 4R008 | 4 | 8 | 0.07 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL10 5R003 | 5 | 2.8 | 0.25 | 9.50 | 0.374 | 5 | 0.204 | 0.8 | 0.032 |
| SCL12 5R004 | 5 | 4 | 0.17 | 11.50 | 0.453 | 5 | 0.204 | 0.8 | 0.032 |
| SCL15 5R005 | 5 | 5 | 0.15 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL15 5R006 | 5 | 6 | 0.10 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL15 5R007 | 5 | 7 | 0.07 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL22 5R012 | 5 | 12 | 0.06 | 22.00 | 0.866 | 6 | 0.245 | 1.0 | 0.032 |
| SCL22 7R005 | 7 | 5 | 0.16 | 22.00 | 0.866 | 6 | 0.245 | 1.0 | 0.040 |
| SCL10 10002 | 10 | 2 | 0.30 | 9.50 | 0.374 | 5 | 0.204 | 0.8 | 0.040 |
| SCL10 10003 | 10 | 3 | 0.20 | 9.50 | 0.374 | 5 | 0.204 | 0.8 | 0.032 |
| SCL15 10004 | 10 | 4 | 0.21 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL22 10005 | 10 | 5 | 0.20 | 22.00 | 0.866 | 6 | 0.245 | 1.0 | 0.032 |
| SCL15 10006 | 10 | 6 | 0.15 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.040 |
| SCL12 16003 | 16 | 2.7 | 0.40 | 11.50 | 0.453 | 5 | 0.204 | 0.8 | 0.032 |
| SCL15 16004 | 16 | 4 | 0.27 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL12 20002 | 20 | 2 | 0.50 | 11.50 | 0.453 | 5 | 0.204 | 1.0 | 0.032 |
| SCL15 25003 | 25 | 3 | 0.40 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL15 47003 | 47 | 3 | 0.50 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL12 50002 | 50 | 2 | 0.72 | 11.50 | 0.453 | 5 | 0.204 | 0.8 | 0.032 |
| SCL15 12102 | 120 | 2 | 1.18 | 15.00 | 0.591 | 6 | 0.245 | 0.8 | 0.032 |
| SCL15 22102 | 220 | 2 | 0.80 | 15.00 | 0.591 | 5 | 0.204 | 0.8 | 0.032 |

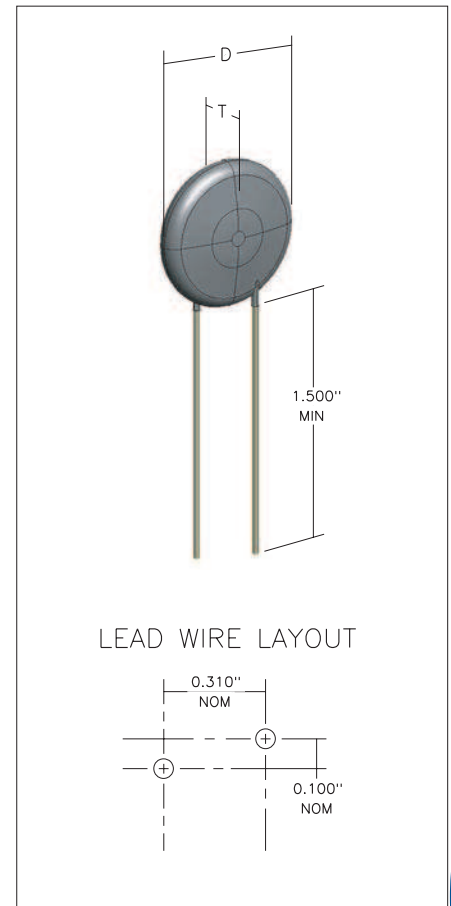
Surge Current Limiters

Features:

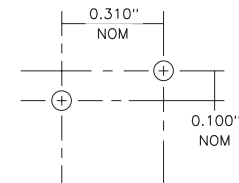
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|---|--|
| Resistance @ 25° C, ± 20% | 0.5 to 220 ohms |
| Maximum Steady State Current..... | 2 to 30 amperes |
| Resistance at Maximum Steady State Current | 0.01 to 1.18 ohms |
| Operating Temperature | -40° to +185°C |
| Storage Temperature | -40° to +220°C |
| Surge Current Life | -15%, +10% Maximum ΔR @25°C |
| Load Life..... | -15%, +10% Maximum ΔR @25°C |
| Temperature Cycle | -15%, +10% Maximum ΔR @25°C |
| Moisture Resistance | -15%, +10% Maximum ΔR @25°C |
| Lead Pull Strength..... | 1 kg, applied in axial direction |
| Solderability of Leads | More than 95% |
| Soldering Heat Resistance | -15%, +10% Maximum ΔR @25°C |
| Construction..... | Straight or kinked tinned copper leads |
| Coating..... | Black silicone or epoxy |

Physical Dimensions:

| | |
|------------------------|-------------------------------------|
| Maximum Diameter | 9.5 mm (0.374") to 32.0 mm (1.260") |
| Maximum Thickness..... | 5.0 mm (0.204") to 8.0 mm (0.327") |
| Lead Diameter..... | 0.8 mm (0.032") to 1.0 mm (0.040") |



LEAD WIRE LAYOUT



Surge Current Limiter