Thyristor Surge Products

**Product Features**

- Telephone port protection
- xDSL protection
- Enables Telecordia GR-1089, UL 60950, FCC (TIA), ITU-T, IEC & YD/T compliance
- UL recognized

**Applications**

- Central office POTS
- Access equipment POTS
- xDSL and integrated line cards
- ISDN line cards & NT equipment
- Cordless DECT & analog phones
- Set-top boxes

**Fixed Voltage TISP® Thyristor Surge Protectors**

**CAPABILITIES**

- Protection Voltage: 11 V to 500 V
- Surge Capability (2/10 per GR-1089-CORE): up to 1000 A
- Surge Capability (8/20 per IEC 61000-4-5): up to 800 A
- Surge Capability (5/310 per ITU-T, K.44): up to 350 A
- Surge Capability (10/1000 per GR-1089-CORE): up to 200 A

**Programmable TISP® Thyristor Surge Protectors**

**CAPABILITIES**

- Dedicated SLIC protection
- Enables Telecordia GR-1089, UL 60950, FCC (TIA), ITU-T, IEC & YD/T compliance
- UL recognized
- Specified in chipset designs for 20 years

**Applications**

- Central office POTS
- Access equipment POTS
- VoIP gateways

**Applications**

- Central office POTS
- Access equipment POTS
- xDSL and integrated line cards
- ISDN line cards & NT equipment
- Cordless DECT & analog phones
- Set-top boxes

**Programmable TISP® Thyristor Surge Protectors**

**CAPABILITIES**

- Wide Programming Range: down to -155 V
- Surge Capability (2/10 per GR-1089-CORE): up to 500 A
- Surge Capability (8/20 per IEC 61000-4-5): up to 500 A
- Surge Capability (5/310 per ITU-T, K.44): up to 150 A
- Surge Capability (10/1000 per GR-1089-CORE): up to 100 A

**I-V Curve**

- Inactive State
- Fully Active State
- Breakdown Voltage
- Shunting
LSP Open LED Shunt Protectors

Product Features
- Improved uptime of the end application by shunting/bypassing open-circuit LEDs in a series string
- Industry standard, small footprint
- Suitable for industrial lighting environments
- Assists with ENERGY STAR compliance

Applications
- Intrinsically safe lighting
- High-bay industrial lighting
- Low maintenance lighting
- Avionics lighting
- LED streetlights

ACTP Transient Protectors

Product Features
- Aids in compliance with IEC 61000-4-5 up to 2.5 kV
- Protection against line voltage swells without increasing protection voltage clamp level
- Precise and stable voltage
- Low voltage overshoot under surge conditions

Applications
- Offline Switch Mode Power Supply (SMPS)
- AC power inputs

CAPABILITIES

LSP Open LED Shunt Protectors
- Breakover Voltage: 6 V to 18 V
- Average On-state Current: 1 A

ACTP Transient Protectors
- Breakover Voltage: 190 V
- Surge Rating (8/20 per IEC 61000-4-5): 1000 A

I-V Curve

inactive state

fully active state

breakdown voltage

shunting

CURRENT

VOLTAGE

breakover voltage

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