BOURNS®

Featured Products Bulletin

SURGE PROTECTIVE DEVICES

February, 2014

Bourns Releases New Surge Protective Device (SPD) Model 1840 DIN Rail Signal and Data Line Protector

Riverside, California - February, 2014 - Bourns is pleased to announce the release of the Model 1840 SPD for Signal and Data Line applications.

The Bourns® Model 1840 is a high performance SPD designed to protect sensitive electronic circuits and components from damaging surge voltages and currents. The extremely fast response and low clamping voltages make this device particularly suitable for the protection of sensitive signal and data lines associated with computer, data communication, instrumentation, broadcasting, and industrial controls.

The Model 1840 is a heavy-duty, Multi-Stage Protector (MSP®) device. A solid-state, third stage protection component intercepts the leading edge of the surge within sub-nanosecond response time. Within micro-seconds, a primary stage, 3-electrode common-chambered, heavy-duty Gas Discharge Tube capable of handling 20,000 ampere lightning currents operates and crowbars the majority of the surge energy to ground.

The Model 1840 also utilizes Bourns® TBU® High-Speed Protector (HSP) technology as a key second stage. Any current exceeding 300 mA through the protector will cause the TBU® HSP to quickly transition into high impedance, thus isolating any harmful voltages and/or currents from damaging the protected equipment. The Gas Discharge Tube protector remains in the crowbar state until the surge has passed and line voltages return to safe levels. The TBU® HSP then automatically restores the line to normal operation by resetting to a low impedance state. There is no need for resetting a breaker or replacing a fuse to address a transient surge event.

The series supports working voltages of 5, 12 and 24 volts and may be used directly with RS-232, RS-422, RS-423 and RS-485 standard EIA interfaces as well as with 4-20 mA and 50 mA instrumentation loops.

Features

- Low peak clamping voltage even during severe current surges
- Ability to repeatedly protect against surge currents in excess of 10,000 amperes
- Convenient mounting and grounding to any flat surface or to DIN-1 (TS-32) or DIN-3 (TS-35) rail
- Cable shields are passed through and may be either grounded or arc-protected to ground

Applications

- Computers
- Data communication
- Instrumentation
- Broadcasting
- Industrial controls

The product data sheet with detailed specifications can be viewed on the Bourns website at www.bourns.com. Please contact your local Bourns Representative or Bourns Customer Service for samples or for further information.

SPD1309