Pxxx0S3N SIDACtor® Thyristor Series

High-Power 3kA (8/20) Surge Current in a DO214AB Package

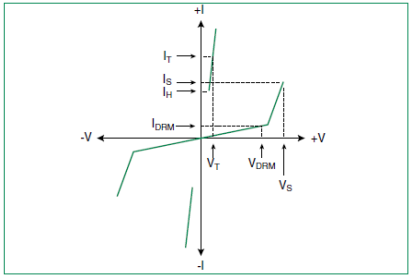
Problem/Solution

The Pxxx0S3N SIDACtor Series thyristors protect equipment located in hostile environments from overvoltage transients. Pxxx0S3N safeguards exposed interfaces in industrial and ICT applications, including RS-485 data interfaces and AC/DC power supplies. The switching voltage (VS) is much lower than Gas Discharge Tubes (GDT), and on-state voltage (VT) is much lower than Metal Oxide Varistors (MOV) and TVS Diodes.

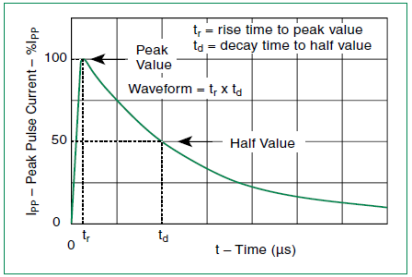
Technical resources *(Click on below icons to learn more)*

Series Page | Datasheet | Tech Info | Application Note

V-I Characteristics



tr x td Pulse Waveform



Features

- Designed for 3kA (8/20) high-power surge protection
- Low thermal accumulation during long term events

Benefits

- Provides superior lower clamping when used in conjunction with a series MOV for Power line protection.
- Low leakage extends the lifetime reliability of series-connected MOV.
- Unlike GDTs/Arrestors, semiconductor-based SIDACtor does not have a wear-out mechanism over multiple transient events.

Markets/Applications

- AC/DC Power lines in Industrial / ICT applications
- Power interface of Energy Storage Systems (ESS)
- EV Wall Chargers / Charging Piles

Littelfuse
Expertise Applied | Answers Delivered