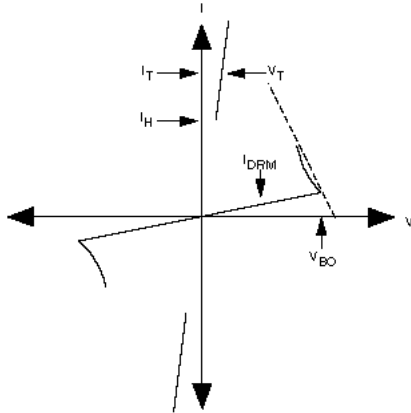
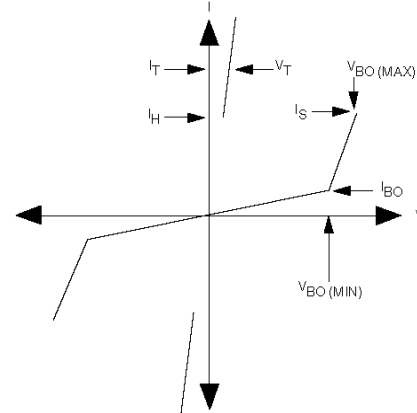


**V-I Characteristics of devices with Negative Resistance**



**V-I Characteristics of devices with Positive Switching Slope**



# SIDACtor<sup>®</sup>

## Solid State Overvoltage Protection

## Comparison Scale

SIDACtors are solid state components used to protect telecom equipment from hazardous transient voltages. Connected across tip and ring, SIDACtors are the fastest, most stable, most reliable, and most cost effective overvoltage protection available.

In the standby mode, SIDACtors exhibit high off-state impedance, making them transparent to the circuits they protect. Upon application of a voltage exceeding the break-over voltage ( $V_{BO}$ ), SIDACtors crowbar (switch from a high off-state impedance to a low on-state impedance) creating a short across tip and ring until the current is either interrupted or drops below the holding current ( $I_H$ ), at which time SIDACtors automatically reset.

Because SIDACtors utilize a patented ion implant technology, they are the fastest responding transient voltage protection available; because SIDACtors are crowbar devices, they cannot be damaged by voltage and will repetitively withstand surge currents up to 500A (2X 10 $\mu$ s wave form), because SIDACtors have low on-state voltage, they eliminate the hysteresis and heat dissipation that is so prominent with other (clamping) technologies; and because SIDACtors utilize the latest thyristor technology, they provide years of protection without degradation.

