



by
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to 24-kV distribution networks. Applications in both RF and power protection equipment are presented. Although there are many interesting circuits and devices presented, the text was difficult to follow, and many of the detailed cross-sectional views of the switches were hard to read and understand. Industrial and HV power engineers may find this book interesting, especially those developing low current HV protection equipment.

Protection Devices and Systems for High-Voltage Applications

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This book describes a family of new high voltage protection relay devices, developed by the author, based on reed relay contacts, hybrid reed-thyristors, and hybrid reed-transistor switches. The switches are used for over-current protection (current interruption and crowbar applications) in HV circuits and as RF high frequency HV switches because of the inherently fast response time of the reed relay. Subsequently, the nominal steady-state currents in these switches range from around 1 to 80 A, and the voltages generally range anywhere from about 1 to 200 kV; however, there are low voltage (480 Vac) applications detailed using commercially available solid-state relays and thyristors.

The author reviews each of the new devices, concepts behind their operation, design details, specifications, and circuit diagrams for each type of switch. Typical applications would be in HV power supplies, lasers, radar, RF generators, and 6-