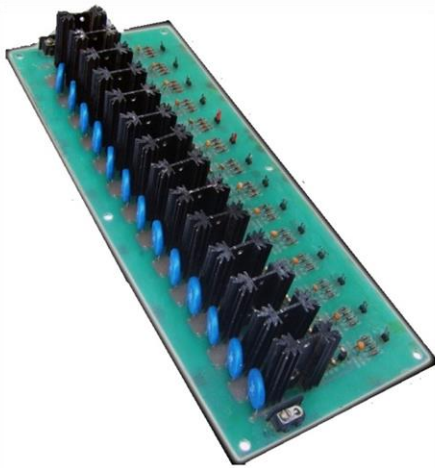


**GROW CONTROL
POWER TECH PVT. LTD.**

We Provide Solutions....

AN ISO 9001:2015 COMPANY



HIGH VOLTAGE SWITCHES

GROW CONTROL Solid State High Voltage Switches are designed for high-speed switching applications, offering reliable and precise control for high-voltage and high-current applications. Utilizing **GROW CONTROL** indigenous technology, these switches enable fast, consistent, and low-loss switching essential for pulse power, particle acceleration, plasma generation, and other high-energy applications. With their robust design and built-in protection, these solid-state switches ensure safe operation even under extreme conditions, meeting the demands of industrial and research applications.

GROW CONTROL Solid State High Voltage Switches provide fast, reliable, and energy-efficient solutions for applications requiring precise high-voltage control. Leveraging **indigenous technology**, these switches are engineered to support a wide range of high-energy applications in industrial, research, and defense sectors, delivering power and precision where they are needed most.

Features

- **High Speed Switching:** Fast response times with sub-microsecond switching speeds, suitable for applications that require rapid switching.
- **High Voltage and Current Capacity:** Handles high peak voltages up to 100 kV and peak currents up to several kA, making it ideal for high-energy applications.
- **Long Lifespan and Low Maintenance:** Solid-state construction provides a high switching lifecycle, requiring minimal maintenance compared to mechanical alternatives.
- **Integrated Safety Mechanisms:** Features built-in protections against over-voltage, over-current, and thermal events to ensure operational safety.
- **Digital and Remote Control Options:** Allows for remote operation and monitoring via digital interfaces, ideal for integration into automated systems.
- **Compact and Modular Design:** Modular, stackable design that is space-efficient and easy to incorporate into various systems.
- **EMI/EMC Compliance:** Designed to meet **MIL-STD-461** and **EN 55022** standards, minimizing interference with sensitive equipment.

Key Advantages

1. **Indigenous Technology:**
Developed and manufactured in India, these high-voltage switches meet local industrial standards with accessible support and customization options.
2. **Fast, Reliable Switching:**
Delivers rapid switching with high reliability, essential for applications requiring precise timing and rapid response.
3. **Extended Service Life:**
Solid-state construction reduces mechanical wear and increases lifespan, making it a durable choice for high-frequency applications.
4. **High Efficiency with Minimal Losses:**
Low resistance and power losses ensure energy efficiency, improving overall performance and reducing operational costs.
5. **Compact and Scalable:**
Designed for modular integration, allowing easy scaling for various levels of high-voltage applications.

Applications

1. **Pulse Power Systems:**
Essential for high-voltage pulse generation in systems used for research, testing, and high-energy applications.
2. **Medical Imaging and X-Ray Systems:**
Reliable high-speed switching supports X-ray systems and other medical imaging technologies requiring precise pulse control.
3. **Particle Accelerators:**
Provides stable, high-speed switching for particle acceleration systems in research and industrial settings.
4. **Plasma Generators and Fusion Research:**
Controls high-voltage switching for plasma generation, useful in fusion research and other advanced plasma applications.
5. **Defense and Aerospace Applications:**
Supports high-voltage pulsed power systems used in defense and aerospace technologies for applications such as radar, directed energy, and EMP systems.

Customization Options

GROW CONTROL offers a wide range of customization options for Solid State High Voltage Switches to fit specific high-energy applications:

- **Custom Voltage and Current Ranges**
- **Enhanced Protection Mechanisms** (Arc suppression)
- **Optimized Cooling Solutions (Air or Liquid)**
- **Triggering Control Options (Analog, Digital, Remote)**
- **Stackable Modular Design for Scalability**
- **Pulse Modulation Options** for specialized applications

Our engineering team works closely with clients to deliver solutions that meet exact specifications, ensuring compatibility with their systems and operational needs.

Why Choose **GROW CONTROL**?

- **Indigenous Expertise:** Tailored to meet the standards of Indian industries, with accessible, localized support and customization.
- **Reliable High-Speed Switching:** Ensures precise, repeatable switching, critical for applications demanding rapid response.
- **Durable and Low Maintenance:** Extended lifecycle and robust design reduce operational downtime and maintenance needs.
- **Energy Efficient and Cost-Effective:** Minimizes power losses for efficient operation, reducing energy costs over time.
- **Customer Support:** From customization to installation and technical support, **GROW CONTROL** provides end-to-end assistance.

Certifications

- **MIL-STD-810** – Environmental Testing Standards
- **MIL-STD-461** – Electromagnetic Compatibility Standards
- **EN 55022** – EMI Compliance
- **ISO 9001:2015** – Quality Management Systems



OUR CLIENTS



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