High Voltage High Current Switch
Type: HVS-12-16

High Voltage High Current Switch Type HVS-12-16 is a hybrid switch configured around an ultrafast triggered high voltage spark gap. The high voltage trigger pulse required for the spark gap is generated using state-of-the-art solid state circuitry with onboard high efficiency DC-to-DC converters for input DC voltage regulation as well as for generating high voltage DC voltage of the order of +300 VDC for the high voltage trigger circuit. Input trigger pulse is optically isolated from high voltage switch circuit for enhanced immunity to spurious triggering. All components used in the design are qualified for most stringent environmental qualification. The Normally Open (NO) switch contacts are brought out through a MIL-qualified high voltage connector.

Specifications

- Self Breakdown Voltage : 12 kV
- Operating Voltage Range : 4 – 10 kV*
- Peak Discharge Current : 16 kA (@ 0.1 Hz PRF)
- Peak Discharge Current : 4 kA (@ 50Hz PRF)
- Maximum Switched Energy : 300 Joules
- Response Time : 20 ns
- Input Trigger : 5 Volt Pulse (TTL/CMOS)
- Input Power : 18 – 36 VDC
- Operating Temp. Range : −40°C to +80°C
- Dimensions : 82 × 82 × 70 mm

- For optimum performance, the operating voltage should be in the range of 7 – 9 kV

Other Features

- Input trigger pulse optically isolated from high voltage circuitry for enhanced immunity to spurious triggering