

PRELIMINARY



**Applied Pulsed Power, Inc.**<sup>TM</sup>

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**Model S34  
Solid State Switch  
For Lithotripters**

A new solid state high voltage switch specifically designed for Lithotripters.

This switch features:

- 32kV Peak Off-State Voltage
- 14kA Peak Non-Repetitive Current
- 10kA Ringing Discharge
- 30kA/ $\mu$ S Maximum di/dt

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These solid state switches are designed specifically for Lithotripters, providing high di/dt at repetition rates of several hertz. Switches for 5kV to 60kV peak off-state voltages are available. Contact [sales@appliedpulsedpower.com](mailto:sales@appliedpulsedpower.com) for more information.

**Operational Ratings** ( $T_j=80^\circ\text{C}$ , unless otherwise specified)

Peak Off-State Voltage	32000	Volts
Maximum DC Operating Voltage	24000	Volts
Peak Non-Repetitive Current	14000	Amps
Peak Repetitive Current (10 $\mu$ sec pulse)	10000	Amps
Maximum di/dt	30	kA/ $\mu$ Sec
Maximum RMS On-State Current ( $T_j=120^\circ\text{C}$ )	100	Amps
Operating Temperature Range	0 to 100	$^\circ\text{C}$
Peak Rate of Reapplication of Off-State Voltage	1000	V/ $\mu$ Sec

**Trigger Characteristics**

Trigger Voltage	15	Volts
Trigger Current	1	A
Trigger Isolation Voltage	60	kV

**Operational Characteristics**

Maximum Leakage Current ( $T_j=25^\circ\text{C}$ )	1	$\mu$ Amp
( $T_j=80^\circ\text{C}$ )	40	$\mu$ Amp
( $T_j=120^\circ\text{C}$ )	800	$\mu$ Amp
Turn-On Delay	2	$\mu$ Sec
Dimensions	2 x 4 x 6.7	inches
	(50 x 100 x 170)	(mm)