



Applied Pulsed Power, Inc.™

2025 Dryden Road
P.O. Box 348
Freeville, NY 13068

Phone: 607-844-3426
Fax: 607-844-3428
www.appliedpulsedpower.com

Model S38 Thyristor Module

Features:

- 4700V Peak Off-State Voltage
- 14kA Peak Non-Repetitive Current
- 30kA/μS Maximum di/dt
- 100nS turn-on delay time
- Low Inductance



Operational Ratings (T_j=80°C, unless otherwise specified)

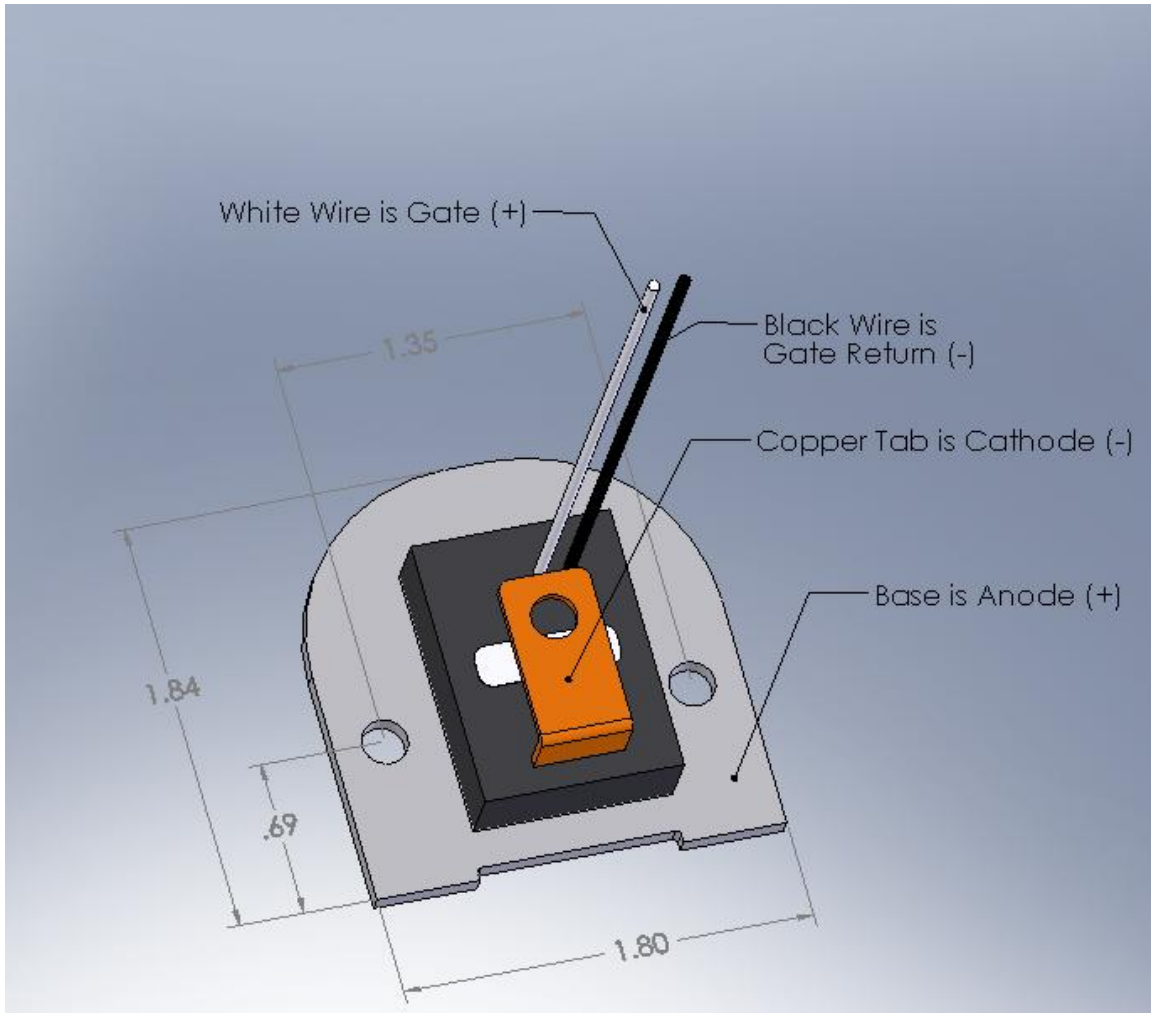
Peak Repetitive Off-State Voltage	4700	Volts
DC Off-State Voltage	4000	Volts
Peak Non-Repetitive Current	14000	Amps
Peak Repetitive Current (10μsec pulse, 60pps)	10000	Amps
Peak di/dt	30	kA/μSec
Maximum RMS On-State Current (T _j =120°C)	100	Amps
Operating Temperature Range	-40 to +120	°C
Peak Rate of Reapplication of Off-State Voltage	1000	V/μSec

Operational Characteristics

Trigger Voltage	15	Volts	
Typical Leakage Current (V _{ak} =4700V, T _j =25°C)	1	μAmp	
	(V _{ak} =4700V T _j =80°C)	20	μAmp
Turn-On Delay	100	nSec	
Turn-On Delay Jitter	<2	nSec	

APP can supply higher current switches by using parallel thyristors and higher voltage switches, for applications such as spark gap replacement, by connecting multiple modules in series. Contact sales@appliedpulsedpower.com for more information.

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Device Drawing

Notes:

1. Mounting holes are sized as a clearance fit for a #10-32 Screw
2. For higher power operation, attach base to a suitable heat sink
3. Gate return is electrically connected to the cathode
4. There is an internal 10Ω resistor between the gate and gate return