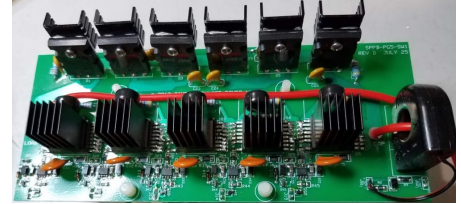


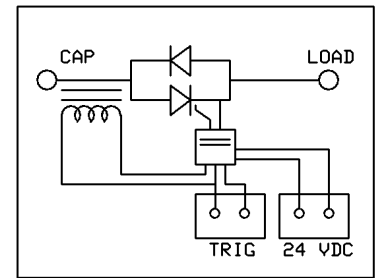
Model SPPS-M1507-D Thyristor Switch Module



Designed for pulsed power applications using a high peak-current thyristor and anti-parallel diode. Trigger input is isolated from switch allowing easy gate control while the trigger threshold prevents triggering from external EMI. Integrated current monitors assures proper gate control even in fault conditions.

Operational Parameters

Parameter	Test Condition	Rating	Unit
Peak Forward Blocking Voltage	Transient	7200	V
Forward Blocking Voltage	Continuous	6000	V
Recommended Trigger Voltage	25 °C	24	V
Trigger Voltage Range	25 °C, 10 μs, 10 Hz	10-45	V
Trigger Isolation Voltage	Transient	10	kV
Peak Forward Blocking Current	25 °C, Vak=2 kV	1	mA
Trigger Current	25 °C, Vtrig=24 V	15	mA
Minimum Trigger Current	25 °C	6	mA
Peak Forward Current	25 °C, 1 μs 25 °C, 10 μs	15 6	kA kA
Peak Reverse Current	25 °C, 1 μs 25 °C, 10 μs	6 4	kA kA
Peak Rate of Current Rise	25 °C	20	kA/μs
Forward slope resistance	25 °C	12	mΩ
Reverse slope resistance	25 °C	50	mΩ
Holding Current	25 °C	50	A
Minimum Trigger Pulse Width	25 °C	1	μs
Thyristor Recovery Time	25 °C	25	μs
Diode Recovery Time	25 °C	100	ns
Capacitance	25 °C, Vak=4 kV	0.7	nF
Pulse Frequency	2 kA, 40 μs Tc = 40 °C	10	Hz
Temperature Range		0-50	°C



Features

- High Peak Current Rating
- Fast Recovery
- Easy Triggering

Applications

- Pulsed Capacitor Discharge
- Solid-State Crowbar
- Pulsed Electromagnetic Field Therapy (PEMF)
- Extra-corporeal Shock Wave Therapy (ESWT)

PRELIMINARY DATA

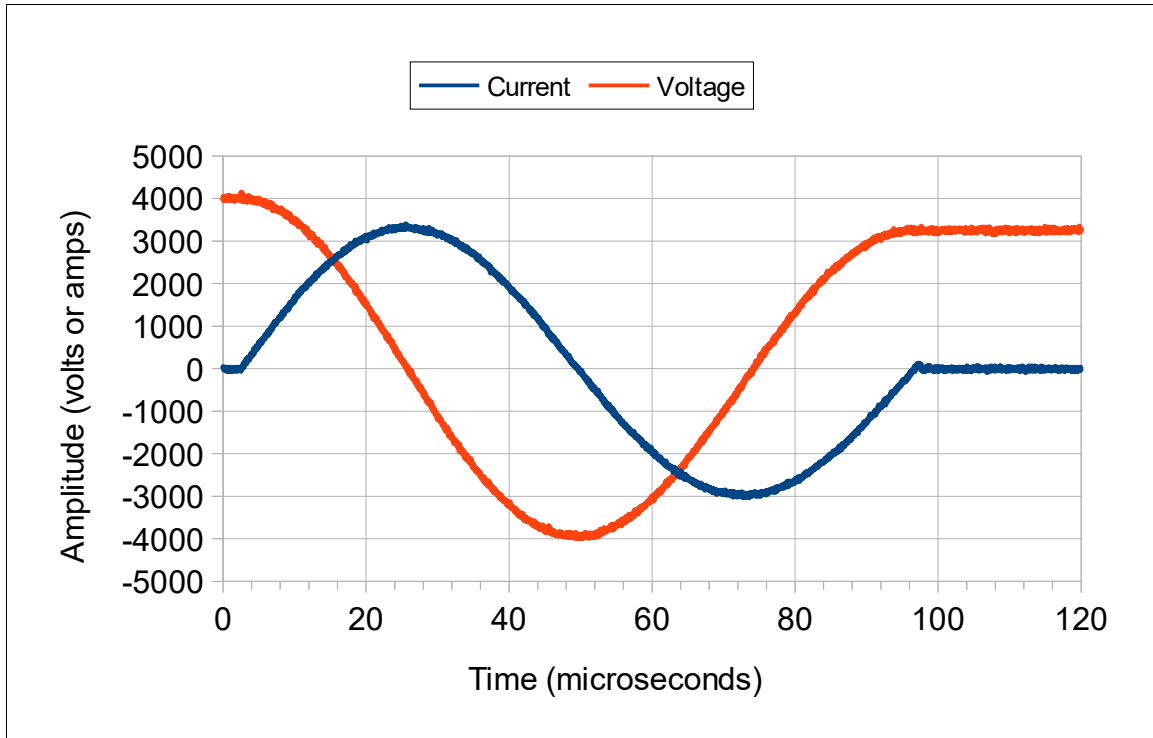


Figure 1: Example Operational Test with 12 μ F Capacitor