

Low Cost Dual Channel Triggered Spark Gap (TSG-DC-001)



Key Points

- Dual Channel
- Low Cost
- Rugged Ceramic-Metal Construction
- Low Capacitance

The **Dual Channel Low Cost Triggered Spark Gap** provides a cost effective, high current, dual channel, low impedance switch. The **Dual Channel Low Cost Triggered Spark Gap** provides a dual channel high current capability with low propagation delay between channels. Lower in cost than implementing individual channels device is ideally suited for low repetition applications. The compact modular design and its lost cost provides a dual channel triggered solution for traditional multi-channel designs.

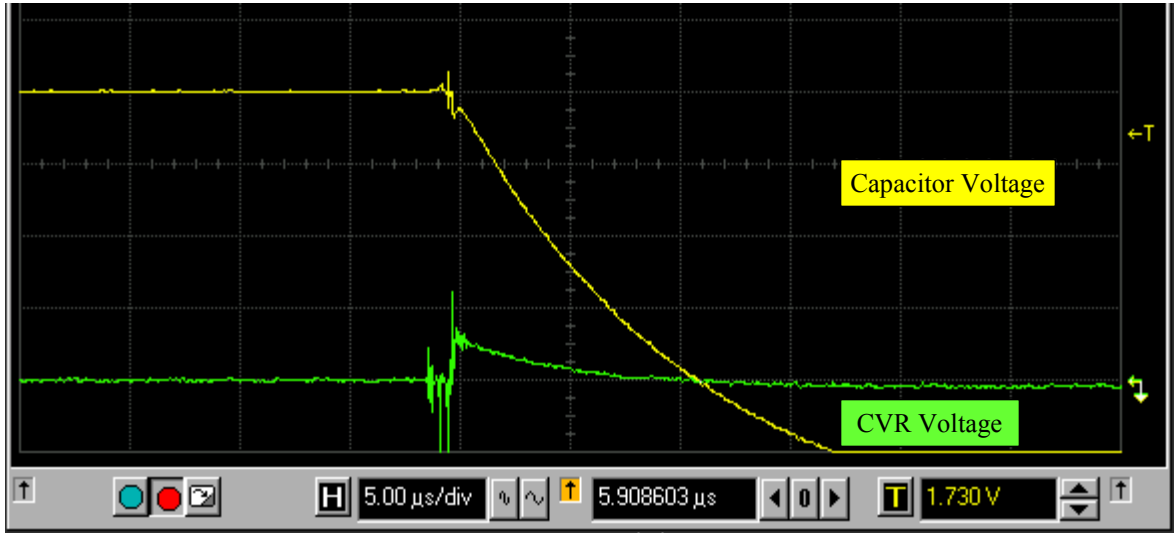
Operating Specifications

Operating Voltage	1 kV to 2.5 kV
Maximum Current	5 kA per Channel
Static Breakdown Voltage	≥ 3.5 kV
Trigger Supply Voltage	200-300 VDC
Trigger Pulse	7VDC to 20VDC @ 100mA minimum
Operating Temperature Range	-40°C to +71°C
Operations	< 10
Trigger Delay	TBD
Capacitance	< 1.5 pF
Channel-to-Channel Isolation	4 kV

Physical Specifications

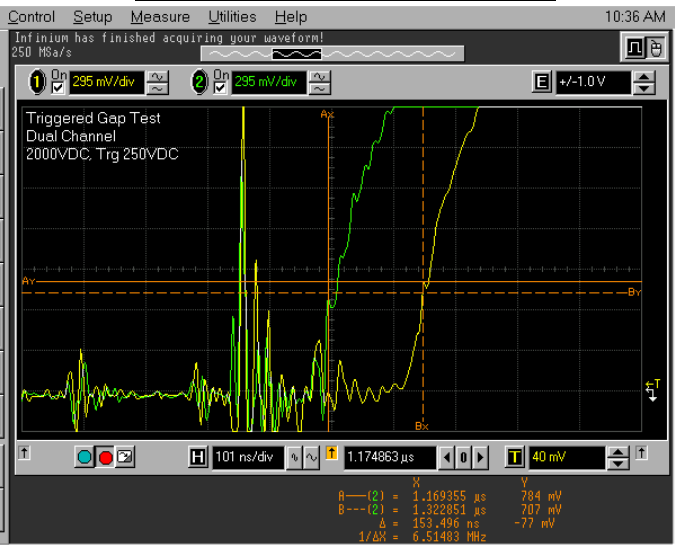
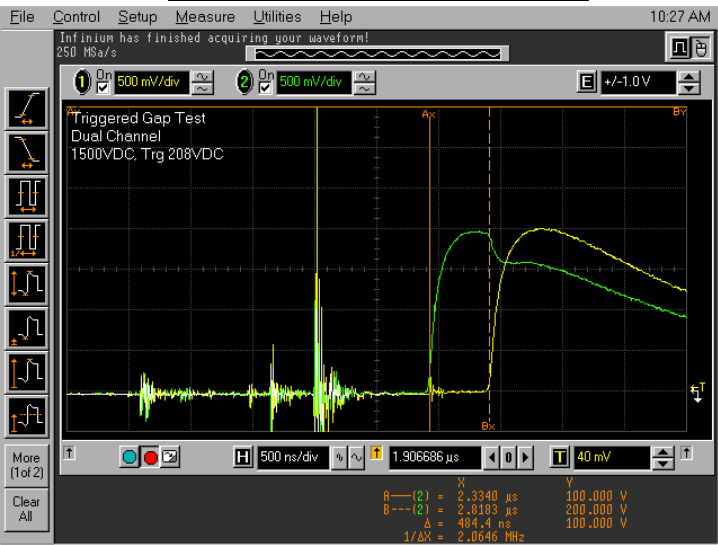
Module Size	3.00" x 2.00" x 1.00" (L x W x H) PRELIMINARY
Mounting	Surface mount pads

Single Channel Test Data
 Capacitor 1uF, Voltage 2.5kV
 Trigger Voltage: 290 VDC

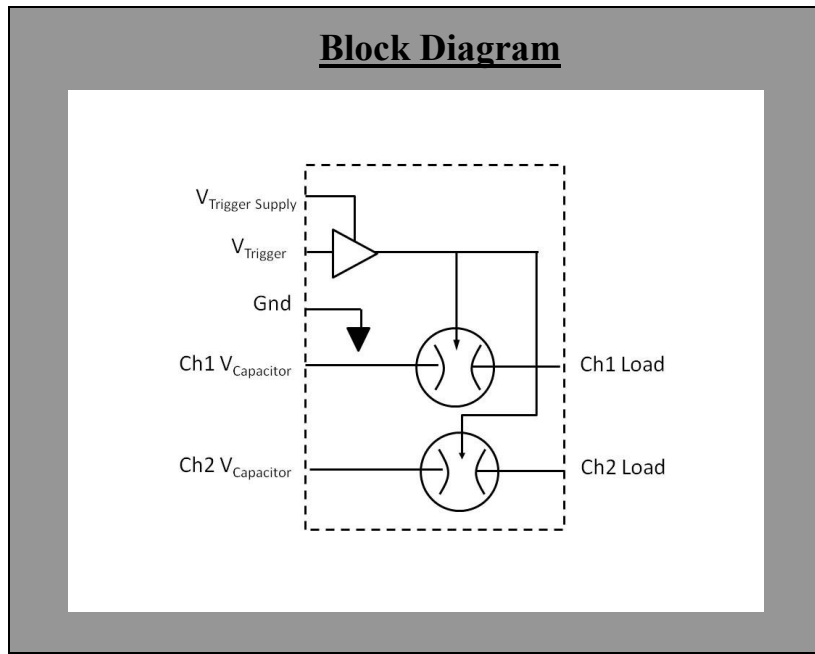


Single Channel Test Data
 Capacitor 0.2uF, Voltage 1.5kV
 Trigger Voltage: 208 VDC
 Ch1-Ch2 Delay: 485ns

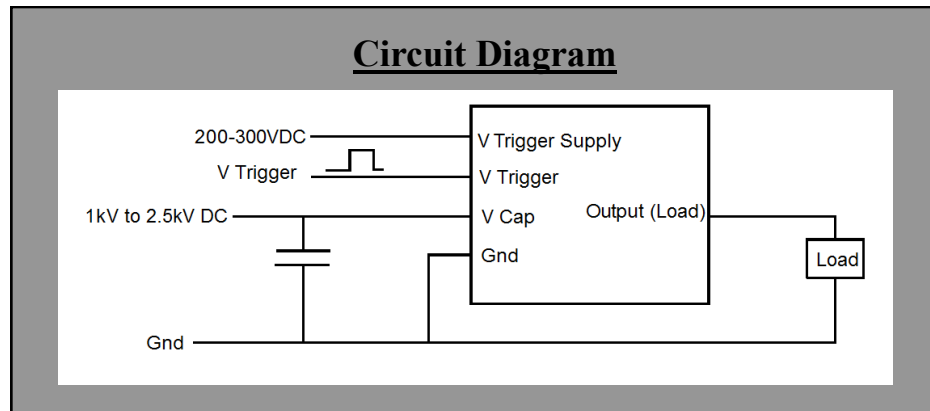
Dual Channel Test Data
 Capacitor 0.2uF, Voltage 2.0kV
 Trigger Voltage: 250 VDC
 Ch1-Ch2 Delay: 155ns



Block Diagram



Circuit Diagram



Preliminary Mechanicals

