

## 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.

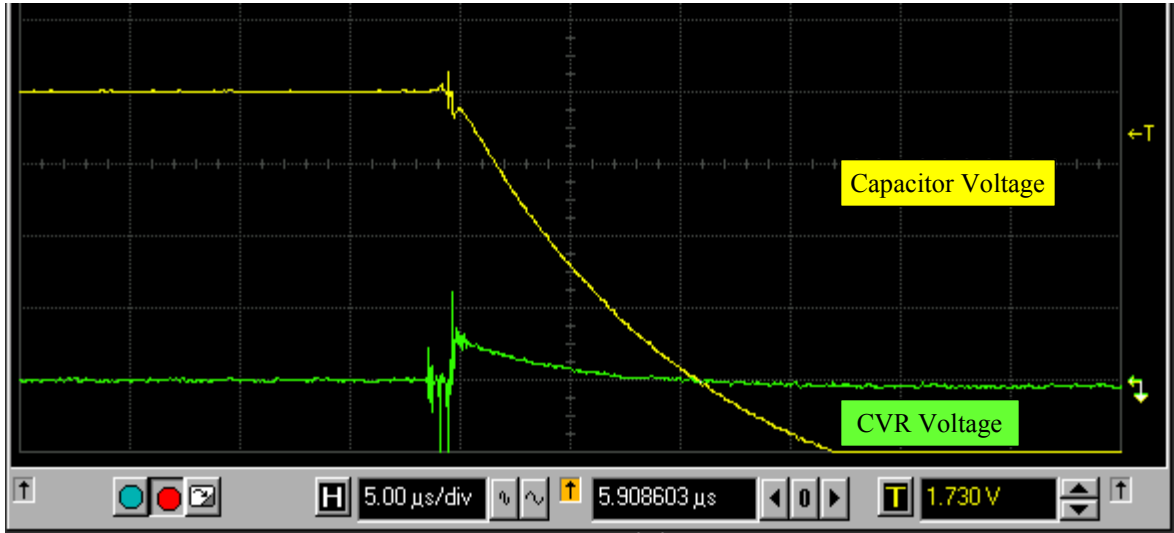
### Operating Specifications

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

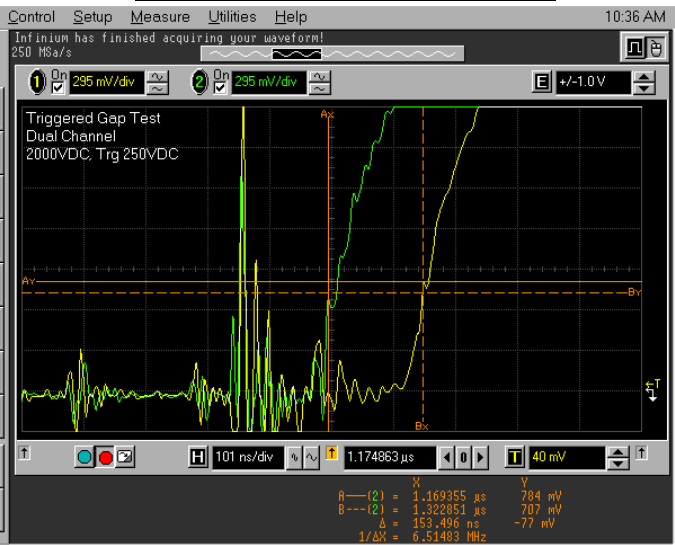
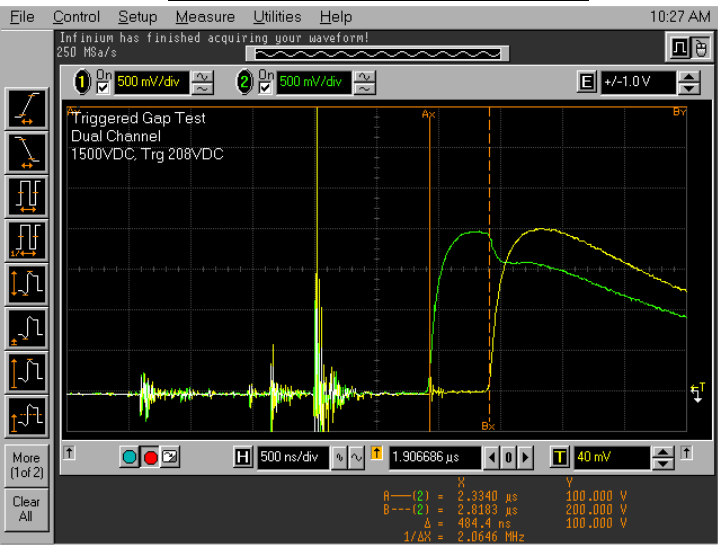
Module Size	3.00" x 2.00" x 1.00" (L x W x H) <b>PRELIMINARY</b>
Mounting	Surface mount pads

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

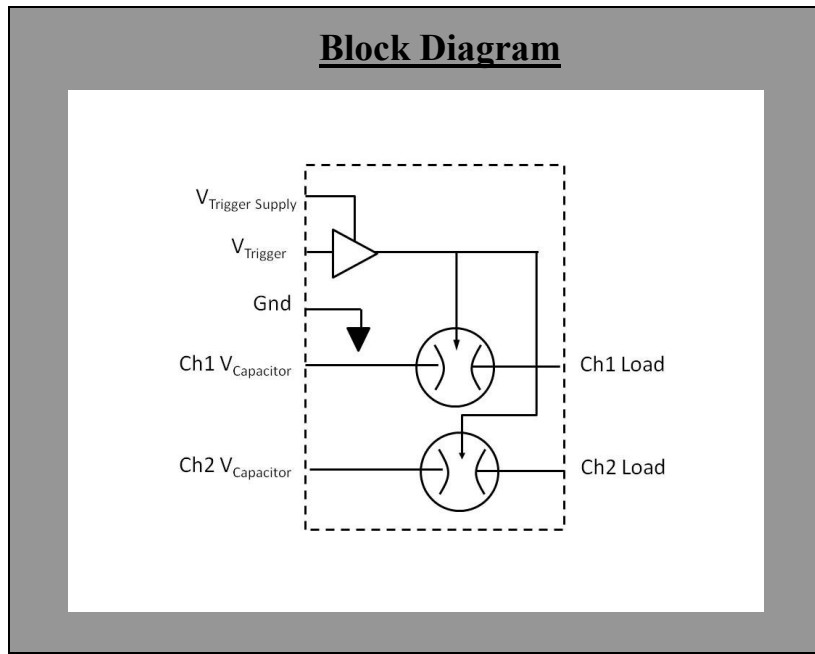


**Single Channel Test Data**  
 Capacitor 0.2uF, Voltage 1.5kV  
 Trigger Voltage: 208 VDC  
 Ch1-Ch2 Delay: 485ns

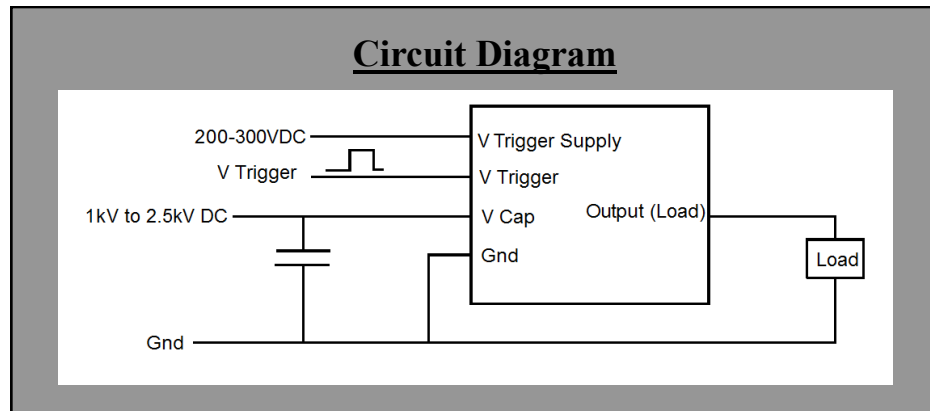
**Dual Channel Test Data**  
 Capacitor 0.2uF, Voltage 2.0kV  
 Trigger Voltage: 250 VDC  
 Ch1-Ch2 Delay: 155ns



## Block Diagram



## Circuit Diagram



## Preliminary Mechanicals

