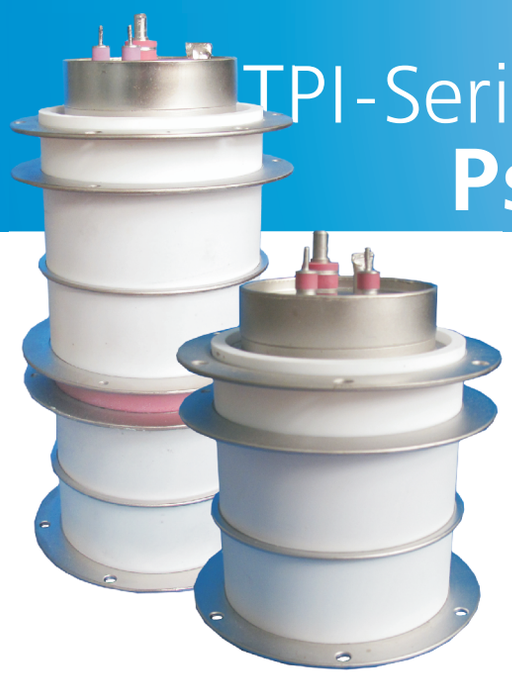
pulsetech
pulsedtechnologies

Yablochkova 5, 390023, Ryazan, Russian Federation
Ph. +7-4912-240519, Fax: +7-4912-249217
info@pulsetech.ru

Pulsed technologies ltd. is a leading global innovation company since 1994

TPI-Series
Pseudospark Switches



- Compact design
- Commercially available and cost effective replacement of thyratrons with thermionic cathode, triggered spark gaps, solid state technology
- No dangerous, no toxic substances
- No heated cathode
- Anode voltage in the range of 3 to 100 kV
- Maximum Anode Current Rise Rate up to $5x10^{12}$ A/sec
- Jitter < 1 ns
- Pulse repetition rates up to 1 MHz
- Hollow anode models for oscillatory decay and bipolar pulses applications
- Trigger and heater units are available from the Manufacturer

The TPI-series of cold hollow cathode thyratrons with ceramic/metal envelope, featuring sub-nanosecond jitter, low firing time and drift. Suitable for switching high power at moderate and high pulse repetition rates in a variety of high peak power applications. Absence of a thermionic cathode facilitates application of the switches in circuits with both electrodes operated under high or transient voltages.

- **High power pulsed lasers**
- **Pulsed electric field technology**
- **Particle accelerators**
- **Medical lithotripters**
- **General fast high energy switching**

Absolute (Maximums/Nonsimultaneous) **Ratings**

Standard models	Peak Forward Anode Voltage, kV	Peak Forward Anode Current, kA	Anode Current Pulse Duration,µsec	Average current, A	Overall dimensions, ØxH, mm
TPI1-0.2k/12	15	1	10	0.15	50x85
TPI1-1k/20	25	3	10	0.15	50x110
TPI1-1k/35	40	3	10	0.15	50x100
TPI1-10k/20	28	10	10	0.5	100x135
TPI1-10k/50	60	10	10	0.5	125x150
TPI1-10k/75	80	10	10	0.5	120x250
TPI1-5k/100	100	5	10	0.1	66x150

pulsetech
pulsedtechnologies

Notes:
a. All the models are available in standard, hollow anode and double-ended packages.
b. Models with average current up to 1A with forced air or liquid cooling are available.
c. The dwell time at the peak anode voltage should be minimized in order to minimize prefiring. For operation at the rated anode voltage, the dwell time must not exceed 10 milliseconds.
d. All data and specifications are subject to change without notice.

Issued May 2012
ISO certified