SOLID-STATE POCKELS CELL/SHUTTER DRIVER

- **Adjustable Push-Pull Output to 3.2 kV**
- **30 ns Typical Risetime**
- **Rugged Solid-State Design**
- **Self-Contained High Voltage Power Supply**
- **Compact Surface Mount Construction**

DESCRIPTION:

The ***Model 823B*** Pockels Cell/Shutter Driver is designed for continuous pulsed applications. Solid-state MOSFET technology is used, giving excellent trigger noise immunity and a smooth output waveform. This technique eliminates common problems associated with krytron, avalanche, and transformer drivers. Amplitude is continuously variable by adjusting the internal high voltage power supply.

SPECIFICATIONS:

Trigger Input	Opto-isolated, active high current of 2.5 mA to 9.0 mA, 2 kΩ impedance
Pulsewidth	≥300 ns to 25 µs
Repetition Rate	Up to 30 Hz
Power	+12 VDC ±0.5 V at 10 mA to 20 mA depending on PRF and output voltage
Temperature	
Operating	-40° to +71°C
Storage	-40° to +85°C
Connections	
Input	4 pin connector *Molex 53261-0471*
Output	12” flying leads

Output	
Voltage	2 kV to 3.2 kV
Load	Tested with 23 pF load, 66.7 MΩ
Risetime	30 ns typical at 3.2 kV, 25°C
Recovery	8 ms typical at 25°C
Hold Time	> 1 µs (at >90%)
T_{delay} in-out	< 300 ns (typical)
T_{jitter}	< 5 ns (typical)
Voltage Control	Internal multi-turn trimpot
MTBF	> 800,000 hrs. per Bellcore SR-332 Ground Fixed, Controlled, 55°C
Size	2.59" x 1.32" x 0.60"
Weight	1.0 oz.

Caution:
Pockels Cell must float electrically.
Mounting hardware must be Non-Conductive.
Nylon hardware is provided.

ISO 9001 CERTIFIED

Specifications subject to change without notice

APPLICATIONS:

Driving E-O Q-Switches for Q-Switching Solid-State Lasers, High Voltage Pulser, E-O Shutter

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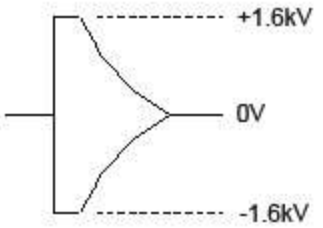
		MODEL NUMBER
		OUTPUT SWING
		2 kV to 3.2 kV
INPUT VOLTAGE	+12 V ± 0.5 V	**823B**
TRIGGER		OPTO-ISOLATED

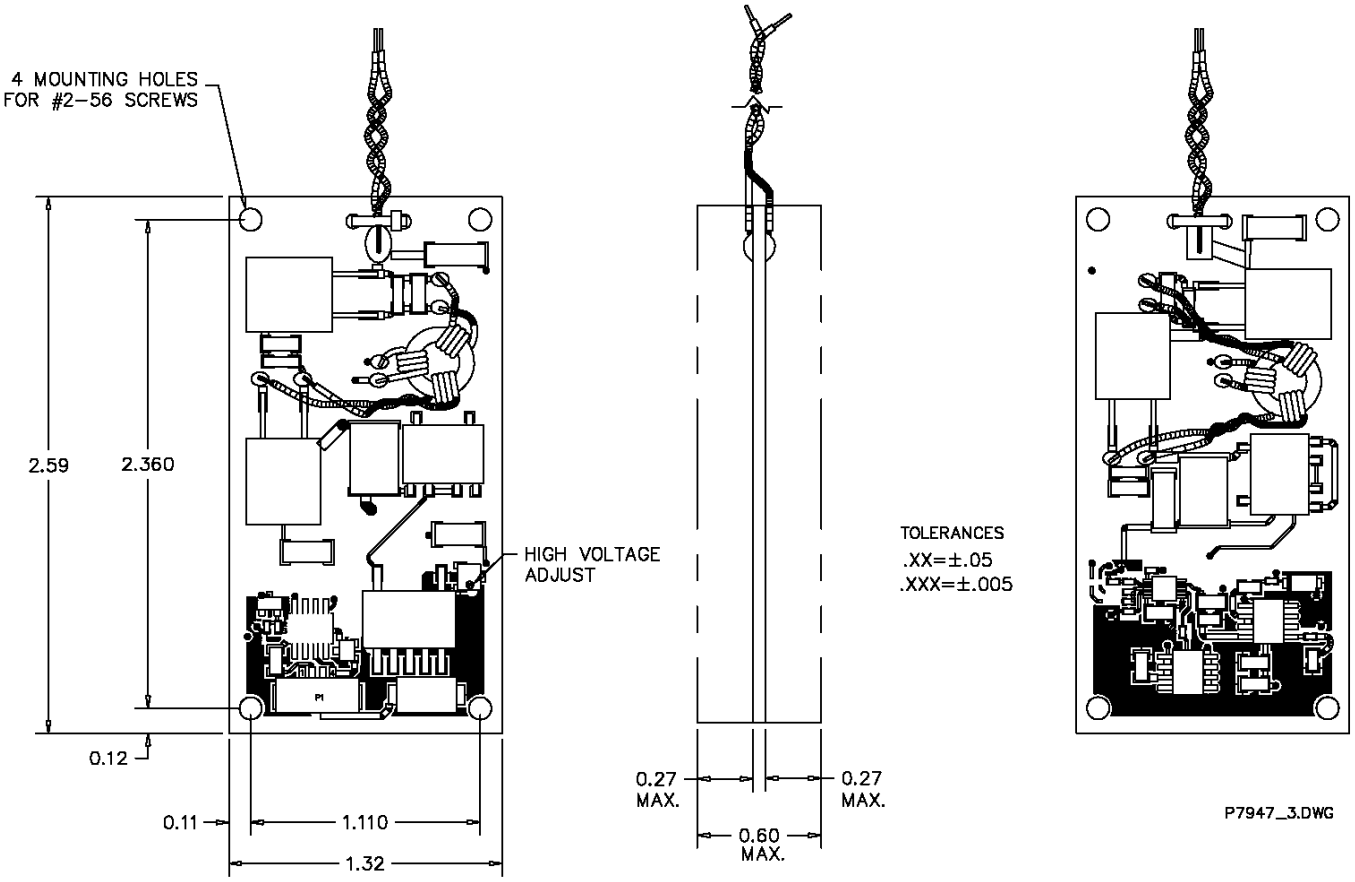
Typical Part Number: ***823B*** **=**

Input Voltage: +12 V ± 0.5 V
Trigger: Opto-isolated
Output Voltage: 2 kV to 3.2 kV
Voltage Control: Internal multi-turn trimpot

CONNECTION	SIGNAL
P1-1	INPUT VOLTAGE (+12VDC)
P1-2	TRIGGER
P1-3	GROUND
P1-4	TRIGGER RETURN

TYPICAL OUTPUT PULSE





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