ANALOG MODULES, INC.

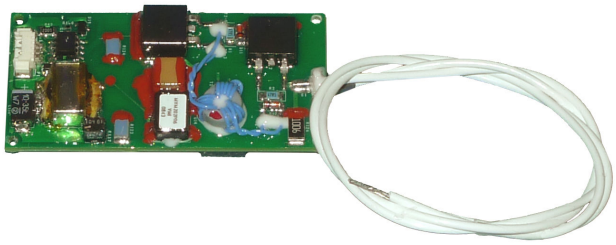
a HEICO company

MODEL 823B

SOLID-STATE POCKELS CELL/SHUTTER DRIVER

SOLID-STATE POCKELS CELL/SHUTTER DRIVER

- **ADJUSTABLE PUSH-PULL OUTPUT TO 3.2kV**
- **30ns TYPICAL RISETIME**
- **RUGGED SOLID-STATE DESIGN**
- **SELF-CONTAINED HIGH VOLTAGE POWER SUPPPLY**
- **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 2.5mA to 9.0mA, input impedance 2kΩ
Pulsewidth	≥300ns to 25µs
Repetition Rate	Up to 30Hz
Power	+12VDC ± 0.5V at 10mA to 20mA 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	2kV to 3.2kV
Load	Tested with 23pF load, 66.7MΩ
Risetime	30ns typical at 3.2kV, 25°C
Recovery	8ms typical at 25°C
Hold Time	> 1µs (at >90%)
T_{delay} in-out	< 300nsec (typical)
T_{jitter}	< 5nsec (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

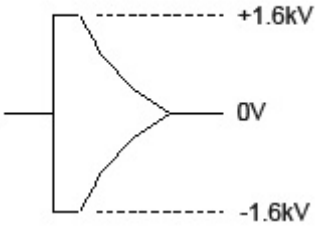
		MODEL NUMBER
		OUTPUT SWING
		2kV to 3.2kV
INPUT VOLTAGE	+12V ± 0.5V	**823B**
TRIGGER		OPTO-ISOLATED

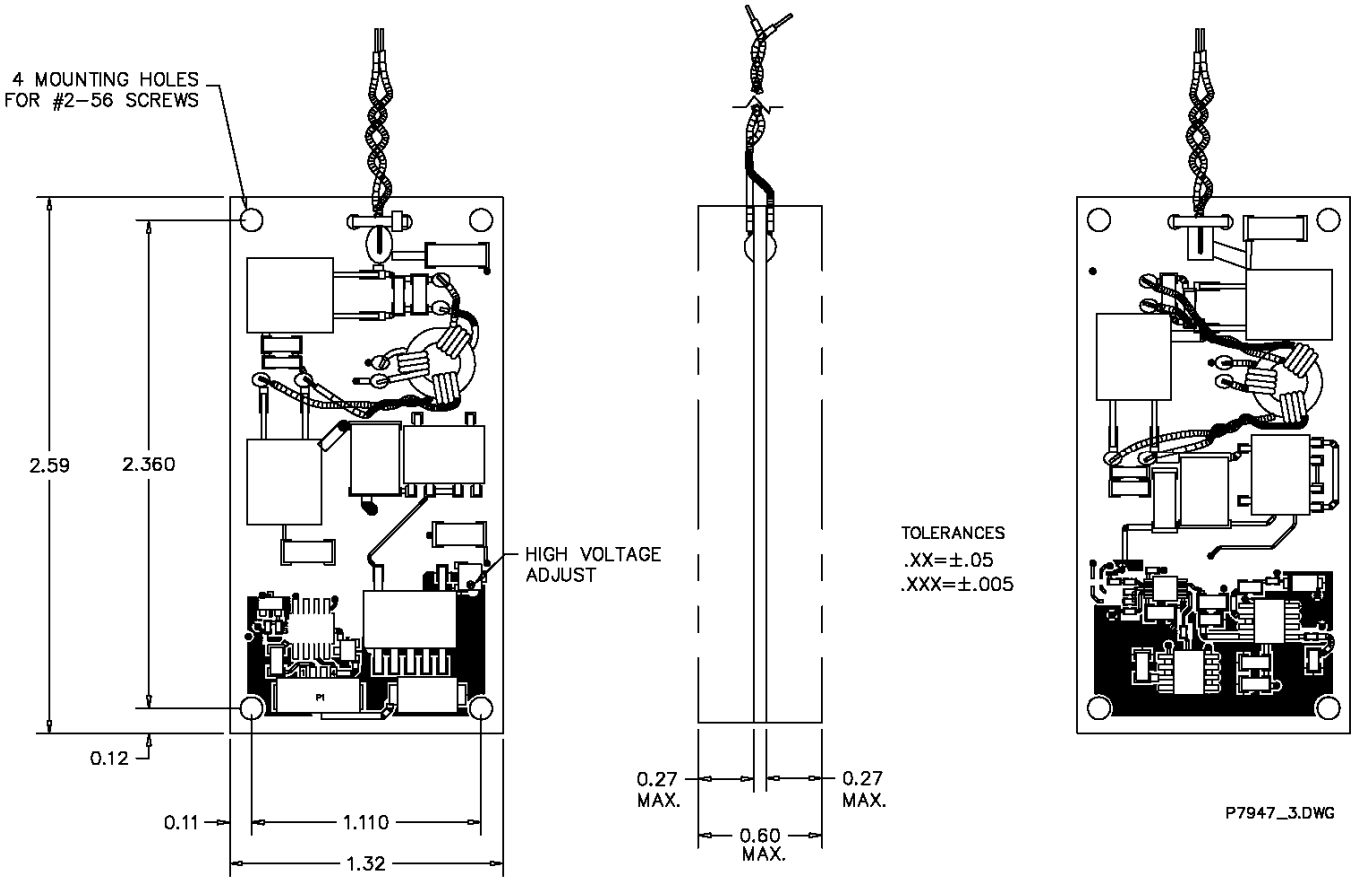
Typical Part Number: ***823B*** **=**

Input Voltage: +12V ± 0.5V
Trigger: Opto-isolated
Output Voltage: 2kV to 3.2kV
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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