



SOLID-STATE POCKELS CELL/SHUTTER DRIVER

- ADJUSTABLE PUSH-PULL OUTPUT TO 3.2kV
- 30ns TYPICAL RISE TIME
- 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 2.5mA to 9.0mA, input impedance 2k Ω | Output | Voltage | 2kV to 3.2kV |
| Pulsewidth | ≥ 300 ns to 25 μ s | Load | Tested with 23pF load, 66.7M Ω | |
| Repetition Rate | Up to 30Hz | Risetime | 30ns typical at 3.2kV, 25 $^{\circ}$ C | |
| Power | +12VDC \pm 0.5V at 10mA to 20mA depending on PRF and output voltage | Recovery | 8ms typical at 25 $^{\circ}$ C | |
| Temperature | | Hold Time | > 1 μ s (at >90%) | |
| Operating | -40 $^{\circ}$ to +71 $^{\circ}$ C | T _{delay in-out} | < 300nsec (typical) | |
| Storage | -40 $^{\circ}$ to +85 $^{\circ}$ C | T _{jitter} | < 5nsec (typical) | |
| Connections | | Voltage Control | Internal multi-turn trimpot | |
| Input | 4 pin connector Molex 53261-0471 | MTBF | > 800,000 hrs. per Bellcore SR-332 Ground Fixed, Controlled, 55 $^{\circ}$ C | |
| Output | 12" flying leads | Size | 2.59" x 1.32" x 0.55" | |
| | | Weight | 1.0 oz. | |

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



Specifications subject to change without notice

APPLICATIONS:

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

