SOLID-STATE POCKELS CELL DRIVER

- Adjustable output to -3.5kV
- 30ns RiseTime, 150 μs Recovery
- Rugged Solid-State Design
- Self-Contained High Voltage Power Supply
- Compact Surface Mount Construction
- Opto-Isolated or TTL Trigger Options

**DESCRIPTION:**

The 825B Series Pockels cell drivers are designed for continuous pulsed applications, such as controlled Q-switching of lasers. 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. Options for triggering include an active high opto-isolator and TTL logic. Pulse amplitudes to -3.5kV are available.

**SPECIFICATIONS:**

| Trigger Input | TTL/CMOS compatible, positive logic, > 3.0V, high impedance, internally limited to +5V via 1kΩ load (825B-1) Opto-Isolated, active high current of 2.5mA to 9.0mA, 2kΩ impedance (825B-2) |
| Pulsewidth | ≥ 300ns to 25μs |
| Repetition Rate | Up to 100kHz at 3.5kV into 47pF load |
| Power | +15VDC ± 0.5V at 20mA to 100mA depending on PRF and output voltage |
| Temperature Operating | -40° to +85° C |
| Storage | -55° to +125° C |
| Connectors Input | 4 pin connector |
| Output | 12" flying leads |
| Specifications subject to change without notice. |

**APPLICATIONS:**

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

126 BAYWOOD AVENUE ♦ LONGWOOD, FLORIDA 32750-3426 ♦ USA
(407) 339-4355 ♦ FAX (407) 834-3806 ♦ E-mail: ami@analogmodules.com
www.analogmodules.com

08/2013
Typical Part Number: **825B-2-HV**

- **Input Voltage:** +15V ± 0.5V
- **Output Voltage:** 0 to -3.5kV
- **Trigger:** Opto-isolated, active high current of 2.5mA
- **Voltage Control:** Internal multi-turn trimpot
- **HV Monitor:** HV monitor lead provided to set HV prior to pulsing

* Rotate HV Adjust trimpot counter-clockwise to increase output voltage

**CAUTION:** Mounting hardware must be Non-Conductive. Nylon hardware is provided.
Output Voltage vs. Maximum Repetition Rate for Various Loads at 25°C, 15VDC Power