# Q-DRIVE OEM

## Driver for KD*P Pockels Cells in Q-switched Lasers

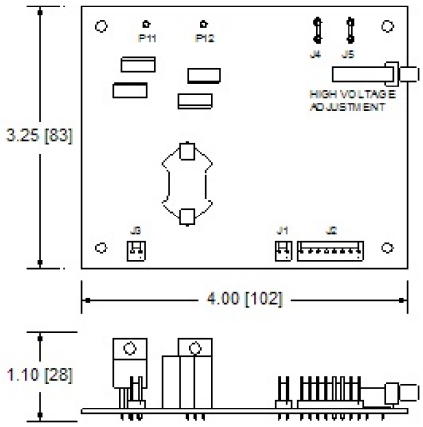
Q-DRIVE™ PRODUCT DATASHEET

### The G&H Q-Drive OEM is a cost effective, high performance Pockels cell driver for incorporation into Q-switched laser systems.

The driver is packaged on a compact 100x83 mm (4x3¼") circuit board. The driver is fully self-contained with the power supply and all control circuitry, needing only 24 VDC and a trigger signal to operate.

Designed for reliability with low component stress and worst-case design margins, the driver meets specifications from -40C to +70C. It works with loads to 30 pF.

G&H can supply the driver in different form factors for high volume applications. For more information please see the Design-In Manual.




### Features

- 4-7 ns, 1.5-4.5 kV, 1Hz-4.5 kHz performance (see graph on page 2)
- 50 ohm isolated trigger
- Voltage monitor
- Status LEDs for power, high voltage and trigger
- Remote on/off and voltage setpoint
- Bipolar balanced output
- 24 VDC input power
- Laboratory version available

### Benefits

- Low power dissipation, less heat
- Remote control ready
- Compact footprint
- Easy integration

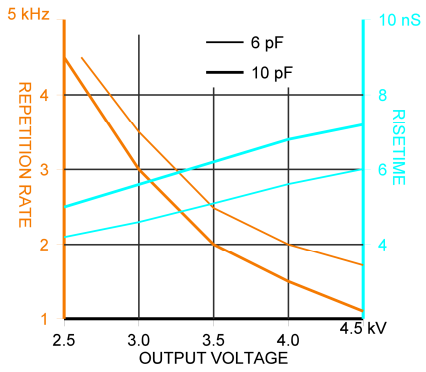
### Applications

- Medical and dermatological laser systems
- Imaging
- Engraving
- Metal cutting
- Microfabrication
- Rangefinding
- Holography

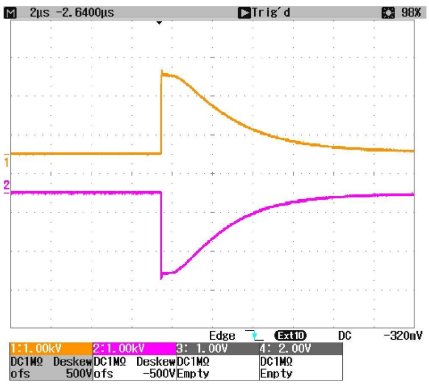
## Specifications

| Parameter | Conditions | Min | Max | Units |
|---|---|---|---|---|
| OUTPUT PULSE PARAMETERS | | | | |
| Pulse top | 4 kV output, 6 pF cell capacitance | | 150 (nom) | ns |
| Decay time constant | 4 kV output, 6 pF cell capacitance | | 5 (nom) | µs |
| Pulse voltage | Limits of adjustment | 1.5 | 4.5 | kV |
| Load capacitance | | | 30 | pF |
| POWER REQUIREMENTS | | | | |
| 24 VDC | Power limit before output fold-back | | 180 | mA |
| TRIGGER | | | | |
| Trigger voltage | | 2 | 8 | V |
| Input impedance | | 48 | 52 | ohms |
| Pulse width | | 200 | | ns |
| Jitter, trigger to output | 2 ns trigger rise time, Tektronix 11801 | | 20 (nom) | ps RMS |
| ENVIRONMENTAL | | | | |
| Temperature | | -20 | 50 | ºC |

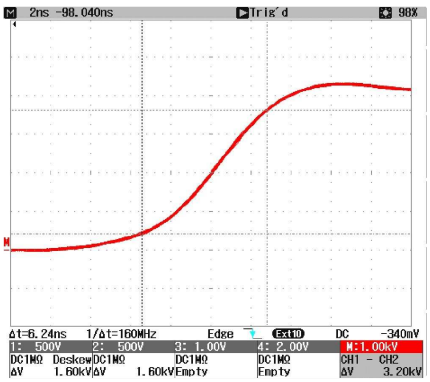
### Typical performance




### Complimentary +/- outputs



### Risetime - 4 kV, 10 pF



## For further information

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