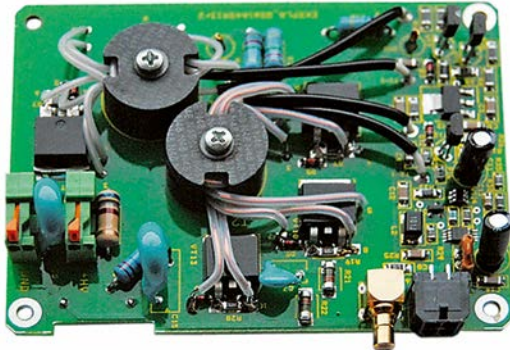


DQF

POCKELS CELLS DRIVER FOR Q-SWITCHING OF FLASHLAMP PUMPED LASERS



External view of DQF-0.2-5 driver



External view of DQF-0.1-8 driver

DQF drivers are designed for Q-switching of nanosecond lasers without use of phase retardation plate. High voltage is applied to Pockels cell in order to inhibit oscillation. Pockels cell is opened by negative polarity pulse allowing laser to radiate.

Drivers DQF-0.1-8D is integrated with ± 4 kV HV power supply. High voltage can be controlled either by onboard trimmer potentiometer or by using CAN interface. We suggest CAN-USB converter with CAN browser software for Windows® operating system. CAN browser can be kept disconnected after proper voltage value is set.

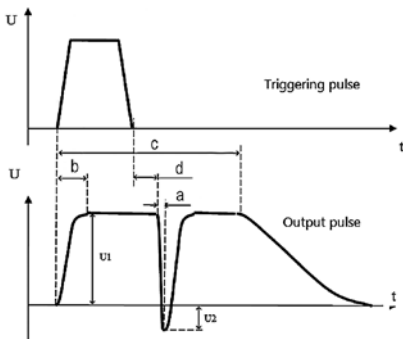


Fig. 1. Time diagram of DQF driver

SPECIFICATIONS

CATALOGUE NUMBER	DQF-0.2-5D	DQF-0.1-8D
Maximum high voltage to cell (HV) pulse amplitude (U1 + U2)	5 kV	8 kV
U1 value (Fig. 1)	equal to HV powering voltage	
U2 value (Fig. 1)	equal to 0.25×U1	equal to 0.25×U1
HV pulse fall time (a)	< 15 ns	< 12 ns
HV pulse rise time, typical (b)	60 μs	120 μs
HV pulse duration, typical (c)	300 μs (1200 μs optionally)	650 μs
HV pulse repetition rate	≤ 250 Hz	≤ 100 Hz
HV pulse delay (d)	40 ns	25 ns
External triggering pulse duration	100 – 1200 μs	120 – 650 μs
External triggering pulse amplitude	3 – 5 V (50 Ω)	3.5 – 5 V (50 Ω)
External triggering pulse rise & fall time	< 20 ns	< 20 ns
Board dimensions ¹⁾	92 × 70 × 22 mm	92 × 70 × 27 mm
Mounting holes location for M3 studs	84 × 62 mm	84 × 62 mm
External powering requirements:		
DC supply	12 – 24 V, max 200 mA	12 V, max 15 mA
HV supply	4 kV, 1 mA	integrated in the driver

¹⁾ Keep safety distance at least 5 mm from any side of board or any component to surrounding conductive parts.

POCKELS CELLS

DRIVERS FOR POCKELS CELLS

HV POWER SUPPLIES FOR PC DRIVERS

LASER DIODE DRIVERS

SYNCHRONIZATION MODULES FOR LASERS

PULSE PICKING SYSTEMS

OVENS FOR NONLINEAR CRYSTALS