

PCD-P SERIES CAVITY DUMPER DRIVER



PCD-P has been designed for use in mode-locked lasers for cavity dumping or for cavity Q-switching of

solid-state nanosecond lasers. Fast HV (less than 7 ns) edge ensures excellent pre- and post-pulse contrast.

SPECIFICATIONS

Model	PCD-PI
Maximum high voltage (HV) pulse amplitude	4.2 kV
HV pulse fall time	< 7 ns
HV pulse rise time	~0.1 ms
HV pulse duration	from 5 to 100 μ s ¹⁾
Maximum HV pulse repetition rate	3 kHz
Jitter	< 0.5 ns
External triggering pulse duration requirement	100 – 1000 ns
External triggering pulse amplitude requirement	3 – 5 V (50 Ω)
External triggering pulse rise & fall time	< 20 ns
HV pulse delay	35 – 40 ns
External powering requirements:	
high voltage supply	4.4 kV, 0.2 mA max
low voltage DC supply	24 – 28 V, 50 mA max
Size	100 × 50 × 40 mm

¹⁾ According to request.

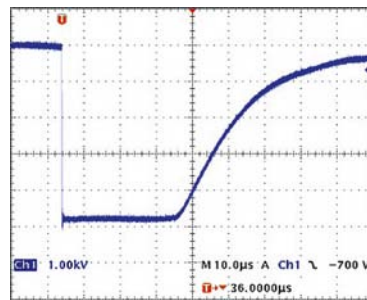


Fig. 1. Oscilloscope of PCD-P driver operation: whole HV pulse

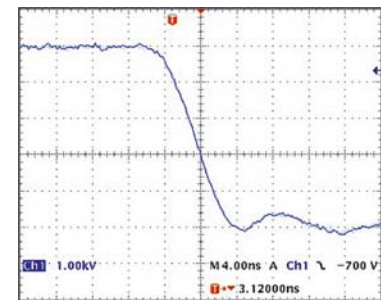


Fig. 2. Oscilloscope of PCD-P driver operation: HV pulse fall

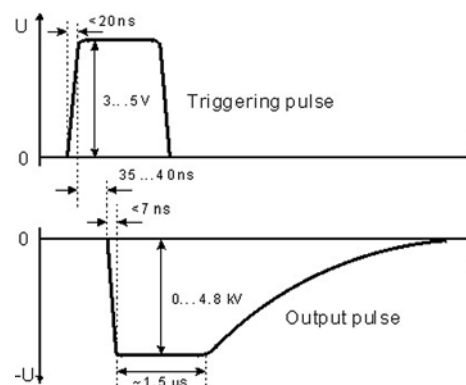


Fig. 3. Time diagram of PCD-P cavity dumping driver