

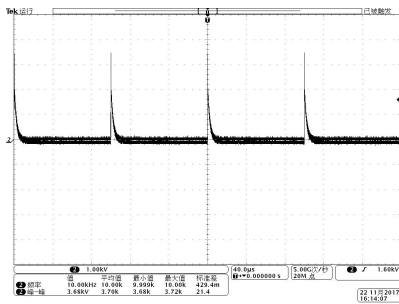
Pockels Cell Drivers



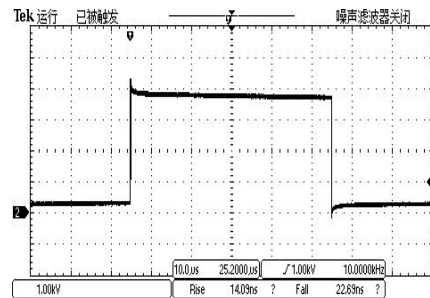
CASTECH provides drivers to complement our Pockels cell series. When receiving a certain frequency trigger signal, **Pockels cell driver** will generate a high voltage with same frequency. By working with a signal generator, the driver is suitable for industrial integration, and can also be controlled by computer (USB to RS-232), which is convenient for scientific research institutes and industrial users to operate intelligently. CASTECH's Pockels cells driver is compatible with the KD*P Pockels cells at low repetition frequency and the BBO Pockels cells at high repetition frequency (~1MHz), the minimum pulse width can reach ~20 ns (PCDH series). The waveform can be positive, negative, and square. CASTECH provides customized services.

Applications

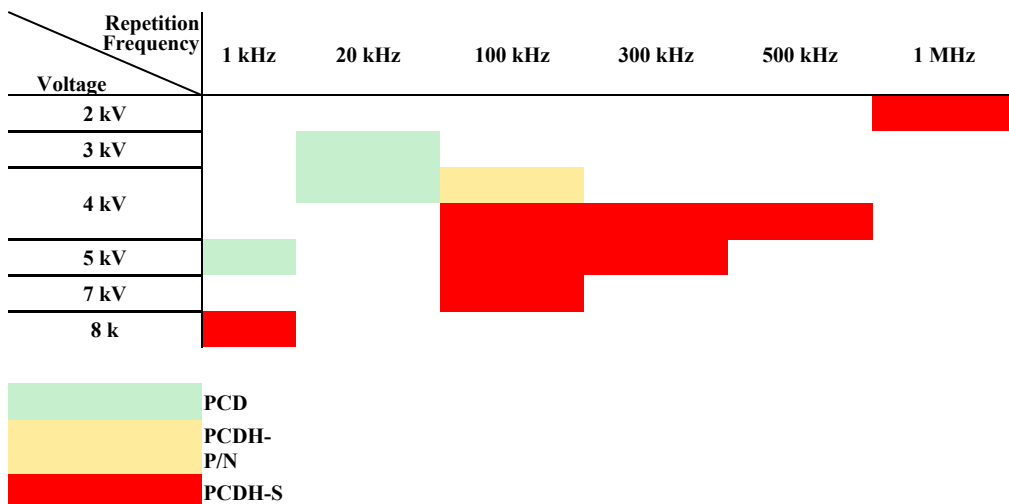
- BBO Pockels cell
- KD*P Pockels cell
- Pulse picker



Typical positive waveform



Typical square waveform



Correspondence diagram of maximum voltage and maximum repetition frequency

Pockets Cell Drivers

Integrated Driver Model Number: PCD-m-f-t-h

Working Mode(m)	Maximum Voltage(v)	Maximum Repetition Frequency(f)	Trigger Mode(t)	Control Mode(c)
S (Square)	5 (5 kV)	1 (1 kHz)	E (External)	N (None) R (USB to RS-232)
	4 (4 kV)	20 (20 kHz)		

Split Driver Model Number: PCDH-mv-f-t-h

Working Mode(m)	Maximum Voltage(v)	Maximum Frequency(f)	Trigger Mode(t)	Control Mode(c)
P (Positive) N (Negative) S (Square)	2 (2 kV)	1000 (1000 kHz)	E (External)	N (None)
	4 (4 kV)	100 (100 kHz)* 500 (500 kHz)		
	7 (7 kV)	100 (100 kHz)		
	8 (8 kV)	1 (1 kHz)		

* Only applicable to positiver/negative mode

Typical Specifications

Working Mode	Pulse Amplitude	Maximum Frequency	Pulse Width	High Voltage Source	Rise Time	Fall Time
Square	4 kV	20 kHz	200 ns~DC	Build-in	≤10 ns	≤10 ns
Positive	4 kV	100 kHz	-	External	≤10 ns	-
Negative	4 kV	100 kHz	-	External	-	≤10 ns
Square	4 kV	500 kHz	25 ns~10 μs	External	≤10 ns	≤10 ns
Square	5 kV	300 kHz	25 ns~10 μs	External	≤10 ns	≤10 ns
Square	8 kV	1 kHz	35 ns~10 μs	External	≤20 ns	≤20 ns

Housing dimensions(mm):

PCDH series

