

Pockels CELLS

BBO Pockels cells

FEATURES

- Minimal piezoelectric ringing
- Low absorption
- Broad transmission range from 266 nm to 2 900 nm
- Compact size

APPLICATIONS

- High repetition rate DPSS Q-switch
- High repetition rate Regenerative Amplifier Control
- Cavity Dumping
- Beam Chopper

EKSPLA distributor in United Kingdom:



Ingcrys Laser Systems Ltd
14 Parris Road, Stokenchurch,
High Wycombe, Bucks. UK
Tel.: + 44 (0) 1494 482541
Fax: + 44 (0) 1494 482873
Email: sales@ingcrys.com
www.ingcrys.com

Lasers and Laser Systems Div.
Savanoriu av. 231
02300 Vilnius – 53
L I T H U A N I A

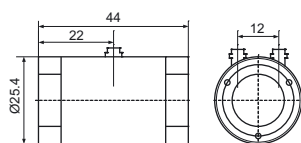
Ph.: +370 5 2649629
Fax: +370 5 2641809
sales@ekspla.com
www.ekspla.com



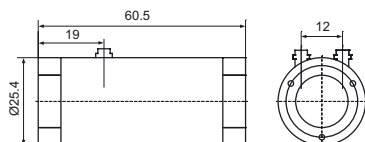
BBO Pockels Cells

Beta Barium Borate (BBO) exhibits negligible piezoelectric ringing and low absorption loss, which makes it excellent choice for high average power and high repetition rate Q-switched lasers and regenerative amplifiers.

Pockels cells of PCB series are transverse field devices. Low electro-optical coefficient of BBO results in high operating voltages. The quarter-wave voltage is proportional to the ratio of electrode spacing and crystal length. As a result, smaller aperture devices has lower quarter-wave, however, even for 2.5 mm aperture devices quarter-wave voltage is as high as 4 kV @1064 nm. Double crystal design is employed in order to reduce required voltages and allowing operation in half-wave mode with fast switching times.



PCB3S, PCB4S



PCB3D, PCB4D

SPECIFICATIONS

MODEL	PCB3S	PCB3D	PCB4S	PCB4D
Clear Aperture diameter, mm	2.5	2.5	3.5	3.5
Quarter-wave voltage, kV	4	2	5.2	2.6
Optical transmission, %	> 98			
Contrast ratio ¹⁾	>2000:1	>1000:1	>2000:1	>1000:1
Damage threshold, J/cm ² for 10 ns pulses @1064 nm	>5			
Capacitance, pF	<4	<8	<3	<6
Dimensions, mm	Ø25.4×44	Ø25.4×60	Ø25.4×44	Ø25.4×60

¹⁾ Measured by crossed polarizers method.

Specifications are subject to changes without advance notice.