

BBO (BaB₂O₄) Pockels Cells

Barium Borate (BaB₂O₄) Pockels Cell is an optical device based on electro-optical effect. BBO Pockels Cell has advantages such as high damage threshold, low insertion loss, high extinction ratio and ultra-low piezoelectric ringing effect. It shows significant advantages in laser power handling capacity, temperature stability and uncompressed electric ringing effect. BBO Pockels Cells are the most attractive candidates for high repetition rate Q-switches, pulse pickup up to 3 MHz, laser cavity dumping, regenerative amplifier control, and beam chopper.



Main features:

- Low piezoelectric ringing effect
- High repetition rate and damage resistance
- Low absorption loss and high UV transmittance
- Wide transmission range (200-2000 nm)
- •High damage threshold and extinction ratio

Typical applications:

- Regenerative amplifier control
- High repetition rate DPSS Q switch
- Laser cavity dumping applications
- Beam chopper

Models		Pockels Cell				
Design	Models	Clear Aperture	Transmittance	1/4 wave	extinction	capacitance
Wavelength				voltage	ratio	
355nm	CL355-2.5-PC001	2.5mm	> 99%	< 3.5KV	1:500	< 8pF
	CL355-5-PC002	5mm	> 99%	< 3.0KV	1:500	< 8pF
532nm	CL532-2.5-PC003	2.5mm	> 99%	< 3.5KV	1:500	< 8pF
	CL532-5-PC004	5mm	> 99%	< 3.0KV	1:500	< 8pF
1030nm	CL1030-2.5-FP005	2.5mm	> 99%	< 3.5KV	1:500	< 8pF
	CL1030-2.5-FP005	5mm	> 99%	< 3.0KV	1:500	< 8pF
1064nm	CL1064-2.5-FP007	2.5mm	> 99%	< 3.5KV	1:500	< 8pF
	CL1064-5-FP008	5mm	> 99%	< 3.0KV	1:500	< 8pF

Technical Parameters

The damage thresholds of the above products are all ≤1GW/cm2@1064nm 10ns 10Hz*

Refer to Appendix P40 for more optical characteristics