

NLO Crystals

Polarizers

Pockels Cells

Wave plates

Laser Crystals

Birefringent Crystals

Optical Crystals

E-O/A-O Crystals

In Stock

Customized Optics

Get a quote

Get a catalog

FAQs

Site Map

BBO single crystal (β -BBO)

Beta-BBO crystal, known as BBO, is one of the best non-linear optical crystals with high effective nonlinear optical coefficient, high damage threshold, wide phase matching range and high deep UV transmittance. BBO is the foremost SHG crystal for Ti:Sapphire lasers. With very good mechanical strength, BBO flakes can be as thin as 5 microns, which is ideal for ultra-short-pulse systems.

In addition to its exceptional nonlinear optical properties, BBO is a good E-O crystal as well. BBO Pockels cells are suitable for systems with high power and high repetition rate. Please contact [our sales team](#) for more details.

There is another form of BBO with different crystal structure, which is called alpha-BBO, known as a-BBO. Alpha-BBO is a good UV birefringent crystal, and is widely used these days in UV [polarizing prisms](#).

Our BBO Crystal Features:

- Devices with thickness of 5 microns are available
- Massive production to support industrial customers
- AR-coating, mounting and re-polishing service
- Strict quality control
- Fast delivery - within 2 weeks (without coating)
- Competitive price and huge OEM discount



BBO device, CA5mm



BBO SHG800nm, CA15mm

Our Standard Specifications for BBO Devices:

- Dimension tolerance: (W \pm 0.1 mm) x (H \pm 0.1 mm) x (L + 0.2 mm/-0.1mm)
- Transmitting wavefront distortion: less than $\lambda/4$ @ 633nm
- Clear aperture: > 90% central area
- Flatness: $\lambda/8$ @ 633nm
- Surface Quality: 10/5 to MIL-O-13830A
- Parallelism: better than 20 arc seconds
- Perpendicularity: 5 arc minutes
- Angle tolerance(degree): D(θ) < \pm 0.5, D(ϕ) < \pm 0.5
- Coating: P-coating and AR-coating available

[View BBO Crystal Properties and Applications](#)

[Click here to get a quote via e-mail](#)



[E-mail this link to a friend](#)

We have the following items in stock, which are ready for shipping immediately.

Description	Quantity
BBO, Type I, SHG800nm, 5x5x0.1mm with AR-coating at 800nm+400nm,	2

and 1-inch holder	
BBO, Type I, SHG800nm, 5x5x0.2mm with AR-coating at 800nm+400nm, and 1-inch holder	1
BBO, Type I, SHG800nm, 5x5x0.5mm with AR-coating at 800nm+400nm, and 1-inch holder	1
BBO, Type I, SHG800nm, 8x8x1.0mm with AR-coating at 800nm+400nm, and 1-inch holder	1
BBO, Type I, 25.8 degree, 5x5x1.0mm, polishing only, no coating, with 1-inch holder	1
BBO, Type I, 38.8 degree, 5x5x0.015mm with substrate, P-coating and 1-inch holder	1
BBO, Type I, THG1064nm, 4x4x7mm with AR-coating at 1064nm+532nm on S1, AR-coating at 355nm on S2, no holder	1
BBO Pockels cell, Brewster-cut, 4x4x20mm with Cr, Au electrode coating and sealed housing	2
alpha-BBO plate, 90-degree-cut, CA15x0.4mm, with AR-coating at 800+400nm and 1-inch holder	1

© 2016 United Crystals. | [Legal Notes](#)

