



# DeLn Optics

Optical Material

Optical Coating

Optical Components

Waveplates

Crystals

Micro Optics

Stock

HOME CRYSTALS NONLINEAR CRYSTALS



## Online Inquiry

Contact:

Company:

Subject: BBO

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E-mail:

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Code:

\*(marked \*should be filled)

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BBO

BBO (beta-BaB<sub>2</sub>O<sub>4</sub>) crystal is an important nonlinear optical crystals with combination of unique optical properties.

Broad transmission and phase matching ranges, large nonlinear coefficient, high damage threshold and excellent optical homogeneity provide attractive possibilities for various nonlinear optical applications.

### Advantages

Broad phase matching (SHG) range from 409.6nm to 3500nm

Wide transmission region from 190nm to 3500nm

Large effective SHG coefficient

High damage threshold of 10 GW/cm<sup>2</sup> for 100 ps pulse-widths at 1064nm

High optical homogeneity with  $Dn \cdot 10^{-6}/\text{cm}^2$

Wide temperature bandwidth of about 55° (for type I SHG 1064nm)

Good mechanical and physical properties

### Applications

SHG, THG, 4HG, 5HG of Nd lasers

SHG, THG, 4HG of Ti:Al<sub>2</sub>O<sub>3</sub> and Alexandrite lasers

SHG, THG and Frequency-mixing of Dye lasers

SHG of Argon ion, Cu-vapor and Ruby lasers OPA and OPO

Pockels' Cell

### Specifications

Tolerance of cutting angle	$\Delta\theta \leq \pm 0.25^\circ, \Delta\phi \leq \pm 0.25^\circ$
Tolerance of dimension	$\pm 0.1\text{mm}$
Flatness	$\lambda/8 @ 632.8\text{nm}$
Surface quality	20/10 Scratch and Dig
Parallelism	20"
Perpendicularity	5'
Bevel/chamfer	$< 0.1\text{mm} @ 45\text{deg.}$
CA	$> 95\%$
Coating	AR/P-coating Upon customer's request

### Notes

BBO has a low susceptibility to the moisture. The user is advised to provide dry conditions for both the use and preservation of BBO.

BBO is relatively soft and therefore requires precautions to protect its polished surfaces.

When angle adjusting is necessary, please keep in mind that the acceptance angle of BBO is small.

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## INFORMATION

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## PRODUCT LINE

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## WARRANTY

All products are guaranteed to be in specifications in material and workmanship for a period of 12 months after shipment.

We do not assume liability for installation, labor or consequential damages.

This warranty is not suitable for failure of the products due to misuse, abuse, accident, or neglect.

## CONTACTS

Deln Optics

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