



# Laser Crystal Manufactuer in China

Offer BBO Crystal, Laser Crystal, Laser Crystal, Birefringent Crystal, Window Crystal To You.

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## BBO Crystal

High Temperature form BBO (a-BaB2O4) is a negative uniaxial crystal. Following exceptional properties make it a very important nonlinear crystal:

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### Diffusion Bonded Crystal

#### Laser Crystal

Nd:YAG Laser Crystal

Cr<sup>4+</sup>:YAG Laser Crystal

Er:YAG Laser Crystal

Nd:Ce:YAG Laser Crystal

Yb:YAG Laser Crystal

Nd:YLF Laser Crystal

Nd:YVO<sub>4</sub> Laser Crystal

#### Optical Windows

BK7 Standard Windows

BK7 High Precision Windows

Fused Silica Standard Windows

Fused Silica High Precision Windows

Coating Film

BK7 Plano-Convex Cylindrical Lens

#### Lens

BK7 Plano-Convex Lens

Fused Silica Plano-Convex Lens

BK7 Double Convex Lens

Fused Silica Double Convex Lens

BK7 Plano-Concave Lenses

Fused Silica Plano-Concave Lens

BK7 Double Concave Lenses

Fused Silica Double Concave Lens

Coating Film

BK7 Plano-Convex Cylindrical Lens

#### Optical Mirror

BK7 Standard Substrate

BK7 High Precision Substrate

Fused Silica Standard Substrate

Fused Silica High Precision Substrate

Beam Splitter Plate

Nd: YAG Laser Beam Combiner

Scanning Mirror

Coating Film

BK7 Plano-Convex Cylindrical Lens

#### Advantage:

1. Broad phase-matching range from 410 nm to 3500 nm
2. Useful optical transmission from 190 nm to 3500 nm
3. High optical homogeneity with dn » 10-6/cm
4. Wide temperature-bandwidth of about 55°C
5. High damage threshold of 10 GW/cm2 for 100ps pulse-width at 1064nm
6. Low thermo-optic coefficient

#### Applictions:

1. Second, third, fourth and fifth harmonic generation of Nd doping lasers
2. Frequency double, tripling and mixing of dye and Ti :Sapphire lasersl
3. Optical parametric amplifier (OPA) and optical parametric oscillators (OPO)
4. Frequency double, tripling and mixing of Dye and Ti :Sapphire lasers
5. Frequency-doubling of Argon ion, Cu-vapor and Ruby lasers
6. Research and development for advanced laser techniques, including all-solid state wide-tunable lasers, ultrafast pulse lasers, and DUV lasers.

#### Chemical and Structural properties of BBO:

Crystal Structure:	Trigonal, space group R3c
Lattics Parameters:	a=b=12.532Å, c=12.717Å, Z=6
Melting Point	About 1095°C
Mohs Hardness	4
Density	3.85g/cm <sup>3</sup>
Thermal Conductivity	1.2W/m/K(⊥c): 1.6W/m/K(//c)
Thermal Expansion Coefficients	a11=4x10-6/K; a33=36x10-6/K

#### Specifications:

Dimension Tolerance	W(+/-0.1) x H(+/-0.1) x L(+0.5/-0.1)mm
Angle Tolerance	+/-0.25°
Perpendicularity	≤ 10’
Scratch/Dig	20/10
Chamfer	≤ 0.2mm x 45°
Parallelism	≤10”
Chips	≤ 0.1mm
Flatness	λ/10@633nm
Clear Aperture	≥ 90%
Wavefront distortion	λ/8@633nm
Coatings	AR/AR@532(R<0.2%)&266(R<0.5%)
	AR/AR@1064(R<0.2%)&532(R<0.5%)&355(R<0.5%) Pcoating/Pcoating

#### Feedback Form

## NLO Crystal

LBO Crystal  
BBO Crystal  
KTP Crystal  
KDP, KD\*P Crystal  
LiNbO<sub>3</sub> / LN Crystal

### Window Crystal

YAG Crystal  
Sapphire Crystal  
CaF<sub>2</sub> Crystal  
MgF<sub>2</sub> Crystal  
BaF<sub>2</sub> Crystal  
LiF Crystal

### Laser Rod Repolishing

### Laser Safety Glasses

### Optical Filter

Medical IPL Filter  
Interference Filter

### Light Pipe Homogenizing

### Laser Beauty Supplies

Laser Handle  
Laser Bonding Crystal



\*Email



Your Email

\*Content

Product Name

http://www.bjpcrystal.com/4-barium-crystal-3.html

Your Name

Your Full Name.

Company

Your Company Name.

Tel./Fax.

### Related Products



#### KDP, KD\*P Crystal

KDP and KD\*P are among the most widely-used commercial NLO materials, characterized by good UV transmission, high damage threshold, and high birefringence. They are usually used for doubling, tripling and quadrupling of a Nd:YAG laser at the room temperature...