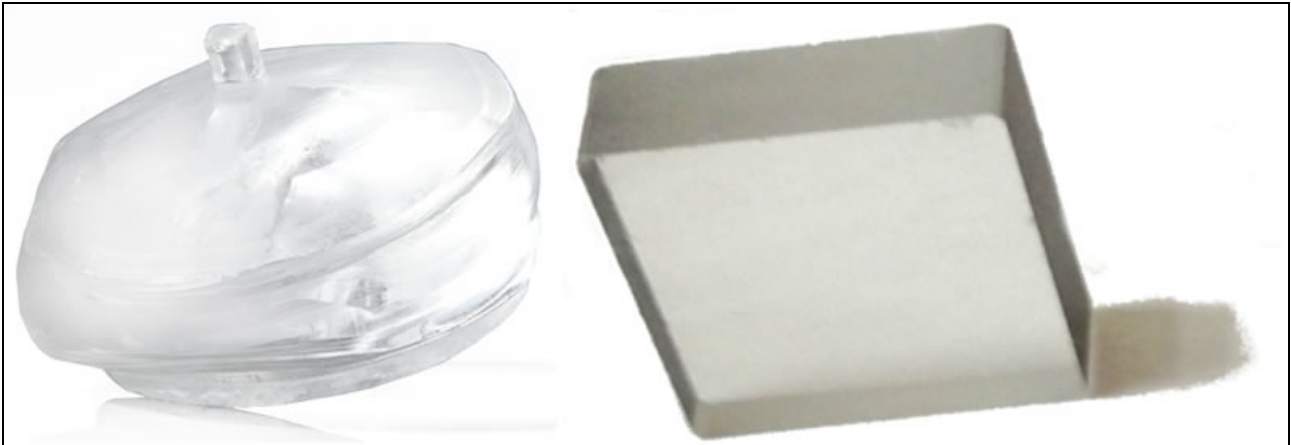


SRC Series BBO Crystals

Beta-barium borate (BBO) is a versatile nonlinear crystal ideally suited for nonlinear laser interactions. BBO crystals combine very wide transparency, moderately high nonlinear coupling, high damage threshold and good chemical and mechanical properties. BBO phase matches over a wide range, yielding SHG, SFD and OPO from 190 to 1780 nm.



Advantages:

- Very wide transparency range
- High damage threshold
- Moderately high nonlinear coefficient
- High optical homogeneity
- Wide temperature-bandwidth

Common Applications:

- Second, third, fourth, and fifth harmonic generation of Nd:Yag lasers
- Second, third, and fourth harmonic generation of Ti:Sapphire and Alexandrite lasers
- SHG of Argon, Cu Vapor and Ruby lasers
- OPO of UV and visible wavelengths
- Electro-optics based on BBO crystals

Typical Specifications for BBO:

Aperture	Up to 15x15mm ²
Length	Up to 20mm
Flatness	Up to $\lambda/10$ @633nm
Perpendicularity	Up to 5arc min.
Parallelism	Up to 5arc sec.
Scratch/Dig	10/5
AR Coatings	AR/AR, DBAR
Absorption Coefficient	dual band R<0.2%
Wave Front Distortion Control	< 50ppm cm ⁻¹ @1064nm < 100ppm cm ⁻¹ @532nm
Guaranteed Laser Induced	$\lambda/8$ @633nm
Threshold	1GW/cm ² @1064 nm 500MW/cm ² @532 nm For 10ns pulses

