

BBO在非线性光学晶体中，是一种综合优势明显、性能良好的晶体。它有着极宽的透光范围、较大的相匹配角、较高的抗光损伤阈值，宽带温度匹配以及优良的光学均匀性，特别是对于Nd:YAG激光器之三倍频有着广泛的应用。

In the nonlinear optical crystal, BBO crystal is a kind of crystal with obvious comprehensive advantages and good performance. It has a very wide light transmission range, a large matching angle, a high resistance to light damage threshold, and a broadband temperature matching. Excellent optical uniformity, especially for the triple frequency of Nd:YAG lasers.

主要特点 Features

- 透光范围宽

Wide transparency

- 宽的相位匹配范围

Broad phase-matching range

- 离散角度小

Small walk-off angle

- 高损伤阈值

High damage threshold

- 接收角度宽

Wide acceptance angle

- 光学均匀性 473nm

High optical homogeneity 473nm



性能参数:

Flatness	$\lambda/8$ at 633nm
Parallelism	≤ 20 arcsec
Wavefront Distortion	$\lambda/8$ at 633nm
Surface Quality	10-5
Perpendicularity	≤ 5 arcmin
Angle tolerance	$\Delta\theta, \Delta\phi \leq \pm 0.25^\circ$
Dimension tolerance	± 0.1 mm
ClearAperture	90% of central area
Chamfer	≤ 0.2 mm $\times 45^\circ$
Chip	≤ 0.1 mm
Damage Threshold	0.5GW/cm ² 21064nm TEM00 10ns 10Hz AR-coated 0.3GW/cm ² 2532nm TEM00 10ns 10Hz AR-coated