Online Inquiry

Contact: *

Company: 

Subject: BBO

Tel: 

E-mail: *

Content: 

Code: 2395

*(marked *should be filled)
BBO (beta-BaB2O4) 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/cm2 for 100 ps pulse-widths at 1064nm

High optical homogeneity with Dn 10⁻⁶/cm²

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:Al₂O₃ 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**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerance of cutting angle</td>
<td>0 ≤ ±0.25°, φ ≤ ±0.25°</td>
</tr>
<tr>
<td>Tolerance of dimension</td>
<td>±0.1mm</td>
</tr>
<tr>
<td>Flatness</td>
<td>λ/8 @ 632.8nm</td>
</tr>
<tr>
<td>Surface quality</td>
<td>20/10 Scratch and Dig</td>
</tr>
<tr>
<td>Parallelism</td>
<td>20°</td>
</tr>
<tr>
<td>Perpendicularity</td>
<td>5’</td>
</tr>
<tr>
<td>Bevel/chamfer</td>
<td>&lt;0.1mm@45deg.</td>
</tr>
<tr>
<td>CA</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>Coating</td>
<td>AR/P-coating Upon customer’s request</td>
</tr>
</tbody>
</table>

**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.