

LBO Crystal

LiB₃O₅ (LBO) is one of the most excellent nonlinear optical (NLO) crystal with the best comprehensive performance. Due to its wide range of transparent wavelength bands, and high multiplier conversion coefficient (3 times that of KDP). LBO also has good mechanical properties and large anti-optical damage threshold. In addition to standard products, VoyaWave Optics provides crystal devices with different specifications that can be customized according to customer needs (please consult to purchase).

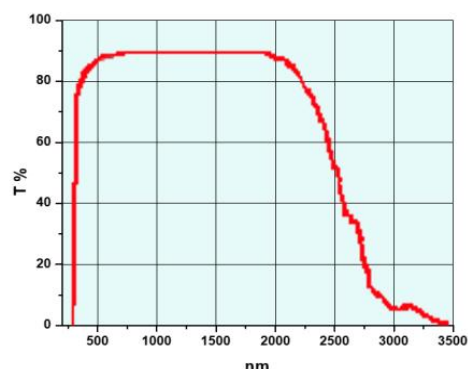
Main features:

- An excellent optical uniformity
- Wide range of transmittable wavelengths (160-2600 nm)
- High multiplier conversion rate (3 times more than KDP)
- High damage threshold

Typical applications:

- Nd:YAG and Nd:YLF lasers multiplier
- OPA and OPO
- Ruby, Ti:Sapphire and Cr:LiSAF laser multiplier.

LBO T%-nm Curve



Standard Products

Model	Size (mm)	θ (°)	Φ (°)	Coating
LBO 401	3 × 3 × 10	90	11.6	AR/AR @ 1064+532 nm
LBO 402	3 × 3 × 15	90	11.6	AR/AR @ 1064+532 nm
LBO 403	4 × 4 × 20	90	11.6	AR/AR @ 1064+532 nm
LBO 404	5 × 5 × 20	90	11.6	AR/AR @ 1064+532 nm

For more information about products click on: www.voyawave.com

Technical Parameters

Names of Parameters	Values & Ranges
Size tolerance	±0.1 mm
Dimension tolerance	$\Delta\theta < 0.5^\circ$, $\Delta\phi < 0.5^\circ$
Clear aperture	> 90%
Surface quality	20/10 after 10/5 membrane
Flatness	$< \lambda/10$ @ 633 nm
Wavefront distortion	$< \lambda/8$ @ 633 nm
Parallelism	< 20 arc sec
Perpendicularity	< 5 arc min
Coating	AR, BBAR, P-coatings
Quality warranty period	1 year (under normal use)

See appendix P30 for more information