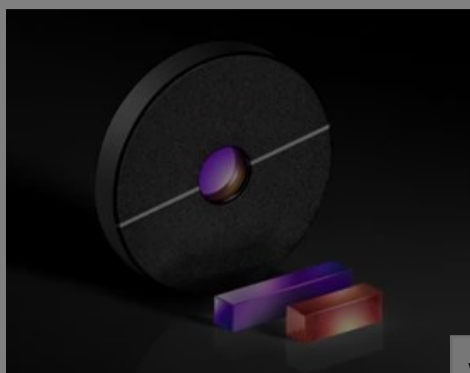


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4 x 4 x 10mm, 1064nm SHG Crystal



1

€615<sup>,00</sup>

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- PDF Drawing:pdf
- IGES:igs
- eDrawing:eprt
- EO Spec Sheet
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General

<b>Type:</b>	Nonlinear Crystal	<b>Typical Applications:</b>	SHG @ 1064 nm, Type I
<b>Crystal Type:</b>	LBO	<b>Protective Chamfer:</b>	<0.1 mm x 45°

Physical & Mechanical Properties

<b>Dimensions (mm):</b>	4.0 x 4.0 +0.0/-0.1	<b>Thickness (mm):</b>	10.00 +0.0/-0.1
<b>Clear Aperture CA (mm):</b>	Not Specified	<b>Parallelism (arcsec):</b>	<20
<b>Perpendicularity (arcmin):</b>	<5		

Optical Properties

<b>Surface Quality:</b>	20-10	<b>Coating:</b>	AR Coating
<b>Design Wavelength DWL (nm):</b>	1064	<b>Surface Flatness (P-V):</b>	λ/8 @ 632.8nm
<b>Coating Specification:</b>	S1: 1064 & 532nm AR Coating S2: 1064 & 532nm AR Coating	<b>Damage Threshold, By Design:</b>	10 J/cm <sup>2</sup> @ 1064nm, 10ns, 10Hz
<b>Damage Threshold, Pulsed:</b>	10 J/cm <sup>2</sup> @ 1064nm, 10ns, 10Hz	<b>Orientation Θ/Φ (°):</b>	90/11.6

Threading & Mounting

<b>Mount:</b>	Unmounted
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Regulatory Compliance

<b>RoHS 2015:</b>	<a href="#">Compliant</a>	<b>Certificate of Conformance:</b>	<a href="#">View</a>
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## Product Details

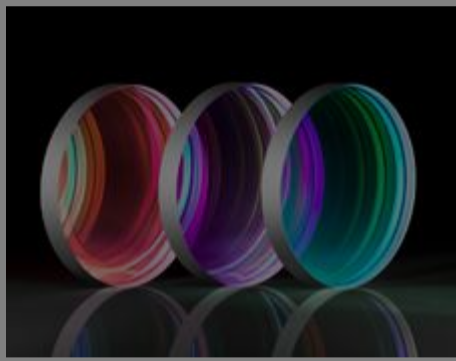
- BBO Crystals for Frequency Conversion of Laser Sources
- LBO Crystals for Frequency Conversion of Laser Sources
- High Damage Thresholds Up to 10 J/cm<sup>2</sup> (CW) and 100 J/cm<sup>2</sup> (Pulsed)
- Broad Transparency Range from the UV to the IR

Nonlinear Crystals of either  $\beta$ -barium borate (BBO) or lithium triborate (LBO) are used for frequency conversion of laser sources. BBO crystals feature thicknesses from 0.2mm to 0.5mm to minimize group velocity mismatch and are ideal for frequency doubling or tripling of Ti:Sapphire and Yb:doped laser pulses. The critical and noncritical phase matching LBO crystals are ideal for second or third harmonic generation of Nd:YAG and Yb:doped lasers. Nonlinear Crystals with 20-10 surface quality and  $\lambda/10$  (LBO) or  $\lambda/8$  (BBO) surface flatness provide the broad transparency range and large nonlinear coefficient needed for the harmonic generation of fundamental laser frequencies. Each crystal features a protective anti-reflection (AR) coating that minimizes reflection and limits fogging from ambient conditions.

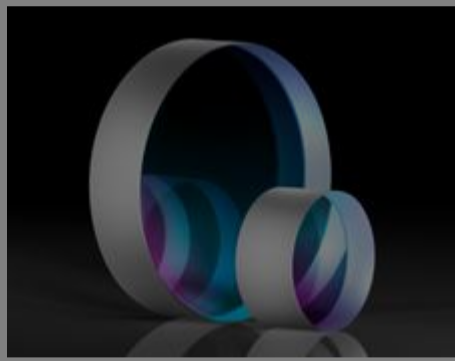
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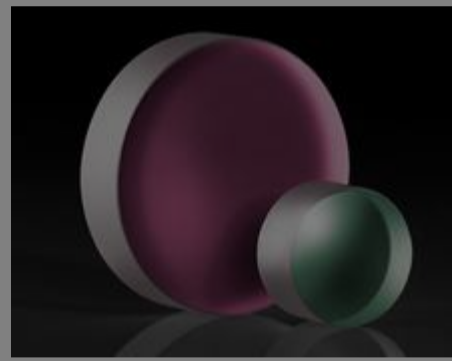
## Related Products



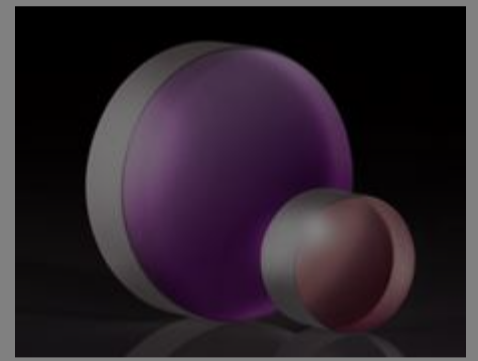
Ultrafast Harmonic Separators



High Performance Low GDD  
Ultrafast Mirrors

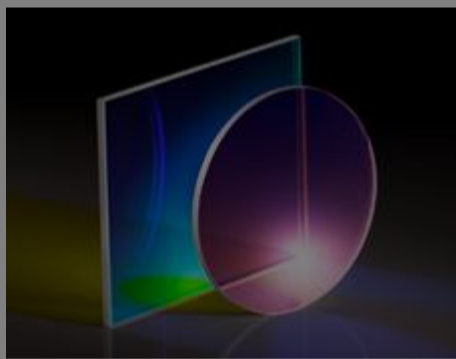


UltraFast Innovations (UFI) 780  
and 800nm Highly-Dispersive  
Ultrafast Mirrors



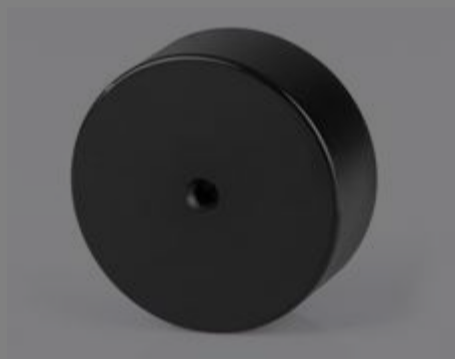
UltraFast Innovations (UFI) 1030nm  
Highly-Dispersive Ultrafast Mirrors

## Frequently Purchased Together



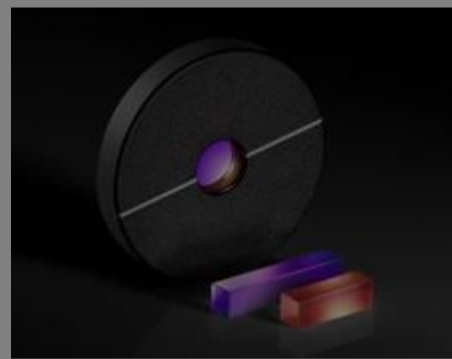
#69-209 - 850nm, 25mm Diameter,  
Dichroic Shortpass Filter  
€195,00

Qty



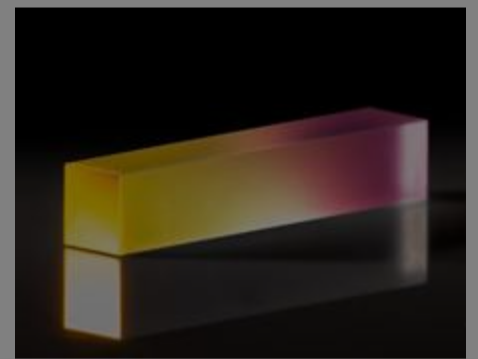
#85-702 - 25mm Diameter  
Blank Disk  
€30,00

Qty



#11-174 - 3 x 3 x 10mm, 1064nm  
THG, Type II LBO Nonlinear Crystal  
€318,00

Qty



#11-173 - 3 x 3 x 15mm, 1064nm  
SHG, Type I LBO Nonlinear Crystal  
€418,00

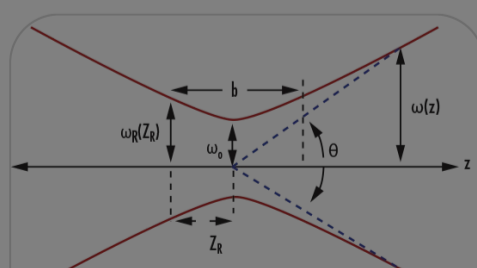
Qty



## Resources

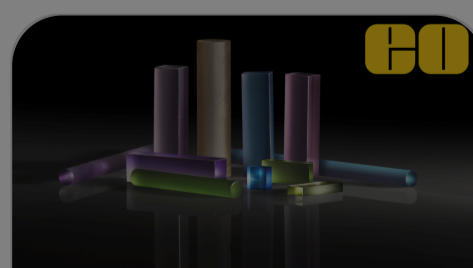
### Media Type

- Technical Tool
- Video
- Glossary
- FAQ
- Application Note



**TECHNICAL TOOL**

Gaussian  
Beams  
Calculator



**VIDEO**

How Laser  
Crystals are  
Made



**VIDEO**

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