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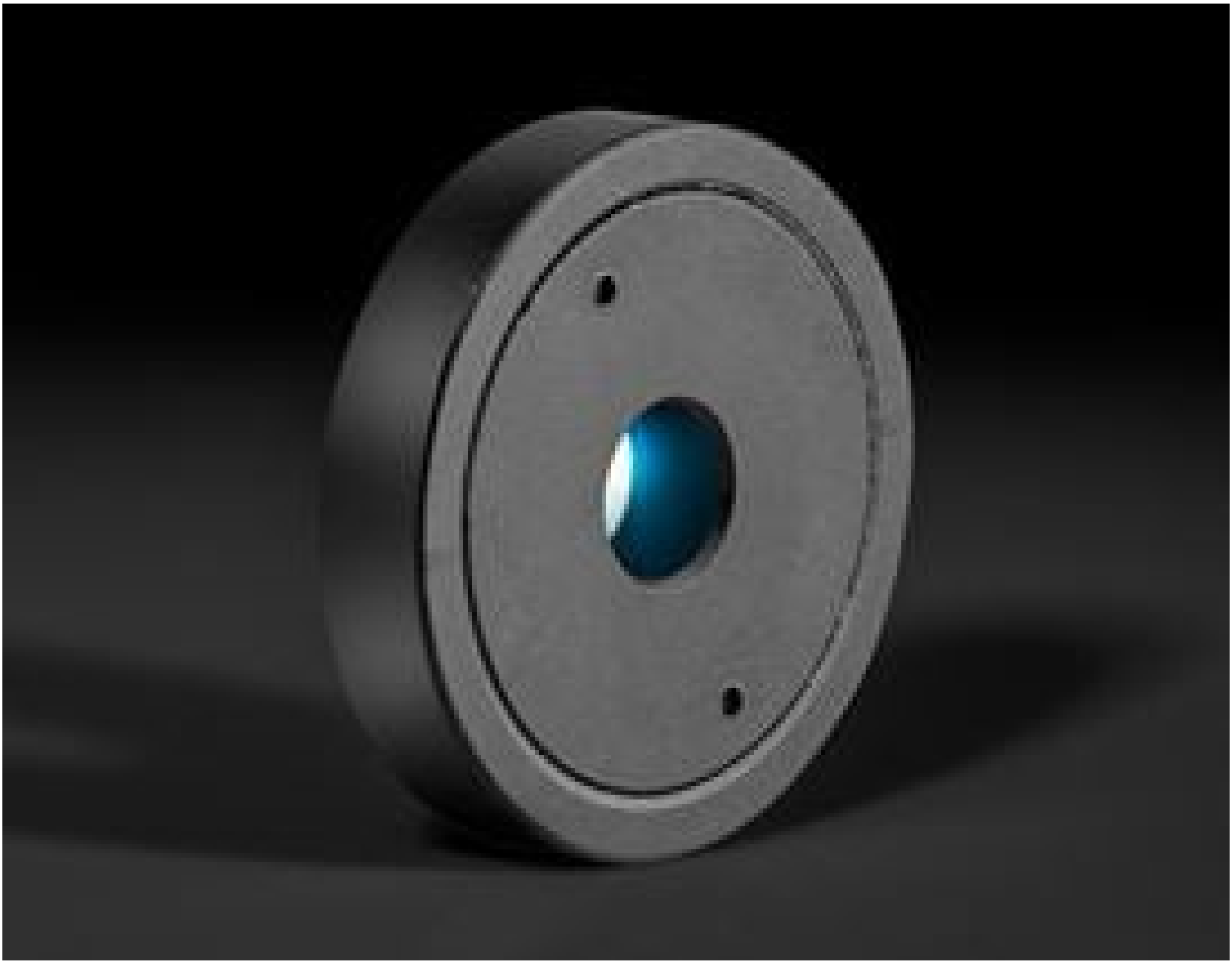
6 x 6 x 0.2mm, 800nm THG, Type I BBO Nonlinear Crystal



Mounted Type I BBO Nonlinear Crystal

Stock **#11-170** **3 In Stock**

- 1 + **€623**.00

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Volume Pricing	
Qty 1-2	**€623,00** each
Qty 3+	**€545,00** each
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Product Downloads

General

Crystal Type:
BBO

Protective Chamfer:
<0.1mm x45°

Typical Applications:
THG @ 800nm, Type I

Type:
Nonlinear Crystal

Note:
Mount is 25.4mm Dia., 6mm Thick Unthreaded Black Anodized Metal Mount (see drawing for more information)

Physical & Mechanical Properties

Clear Aperture CA (mm):
5.70

Dimensions (mm):
6.0 x 6.0 +0.0/-0.1

Thickness (mm):
0.20 +0.0/-0.1

Parallelism (arcsec):
<20

Perpendicularity (arcmin):
<5

Optical Properties

Design Wavelength DWL (nm):
800

Orientation Θ/Φ (°):
44.3/90

Coating:
AR Coating

Coating Specification:
S1: 400 - 800nm Protective Coating
S2: 266nm Protective Coating

Surface Quality:
20-10

Surface Flatness (P-V):
λ/8

Damage Threshold, By Design:
10 J/cm^2 @ 1064nm, 10ns, 10Hz

Threading & Mounting

Mount:
Mounted

Mount Diameter (mm):
25.4

Mount Thickness (mm):
6 (unthreaded)

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 247:
Compliant

Product Details

- BBO Crystals for Frequency Conversion of 800nm and 1030nm Lasers
- LBO Crystals for Frequency Conversion of 1030nm and 1064nm Lasers
- High Damage Thresholds Up to 10 J/cm^2 @ 1064nm, 10ns, 10Hz
- Broad Transparency Range from the UV to the IR

Nonlinear Crystals of either β-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 λ/10 (LBO) or λ/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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