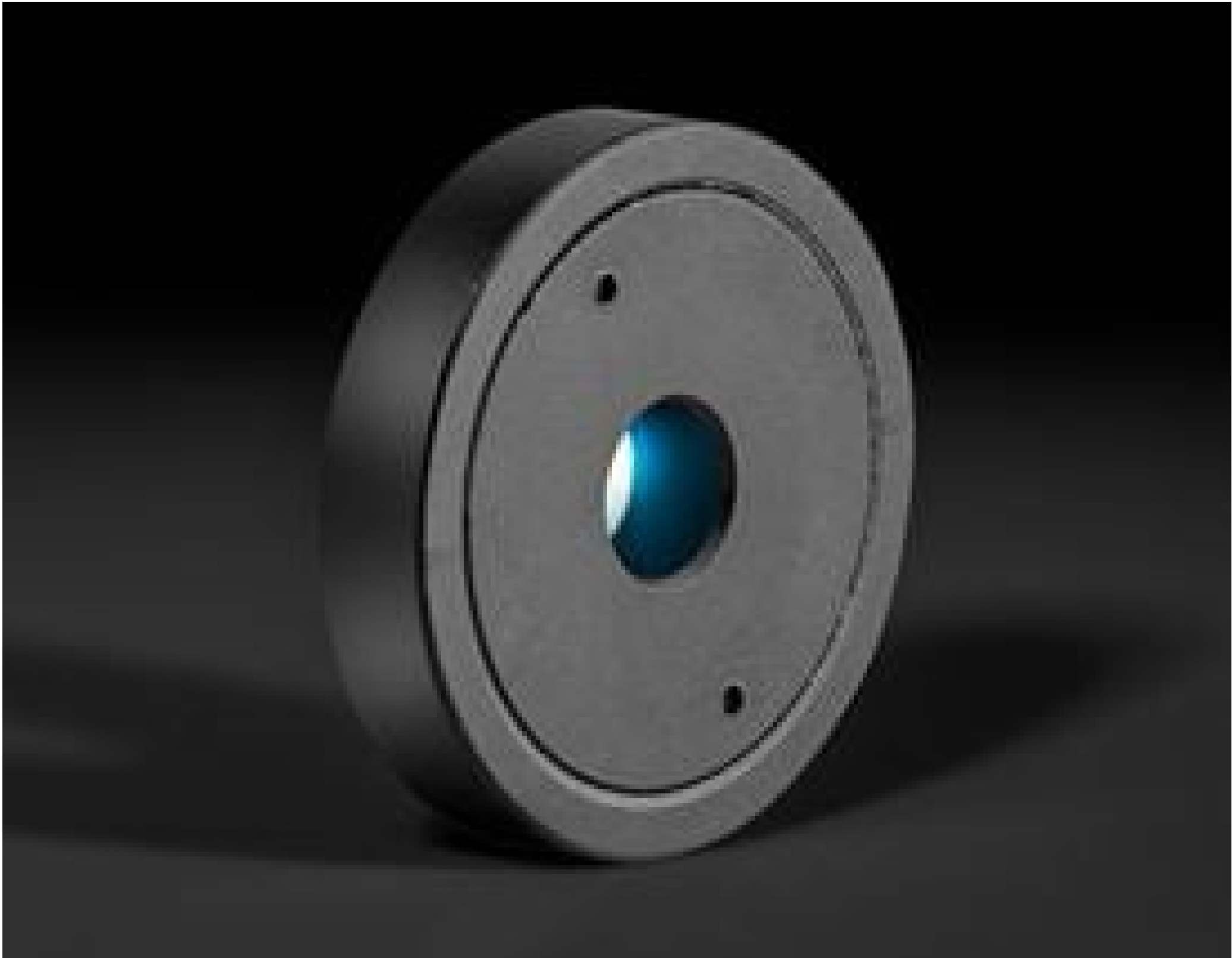


6 x 6 x 1mm, 800nm SHG, Type I BBO Nonlinear Crystal



Mounted Type I BBO Nonlinear Crystal

Stock **#15-277** [CONTACT US](#)

-

1

+

€524⁰⁰

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Volume Pricing	
Qty 1-2	€524,00 each
Qty 3-25	€464,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

BBO	Crystal Type:
	Protective Chamfer:

<0.1mm x45°	
SHG @ 800nm, Type I	Typical Applications:
Nonlinear Crystal	Type:
Note: Mount is 25.4mm Dia., 6mm Thick Unthreaded Black Anodized Metal Mount (see drawing for more information)	

Physical & Mechanical Properties

5.70	Clear Aperture CA (mm):
6.0 x6.0 +0.0/-0.1	Dimensions (mm):
1.00 +0.0/-0.1	Thickness (mm):
<20	Parallelism (arcsec):
<5	Perpendicularity (arcmin):

Optical Properties

800	Design Wavelength DWL (nm):
29.2/90	Orientation Θ/Φ (°):
AR Coating	Coating:
S1 & S2: R _{avg} <3% @ 400 - 800nm	Coating Specification:
20-10	Surface Quality:
λ/8	Surface Flatness (P-V):
Damage Threshold, By Design: ☐ 10 J/cm² @ 1064nm, 10ns, 10Hz	

Threading & Mounting

Mounted	Mount:
25.4	Mount Diameter (mm):
6 (unthreaded)	Mount Thickness (mm):

Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 247:

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/cm² @ 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.