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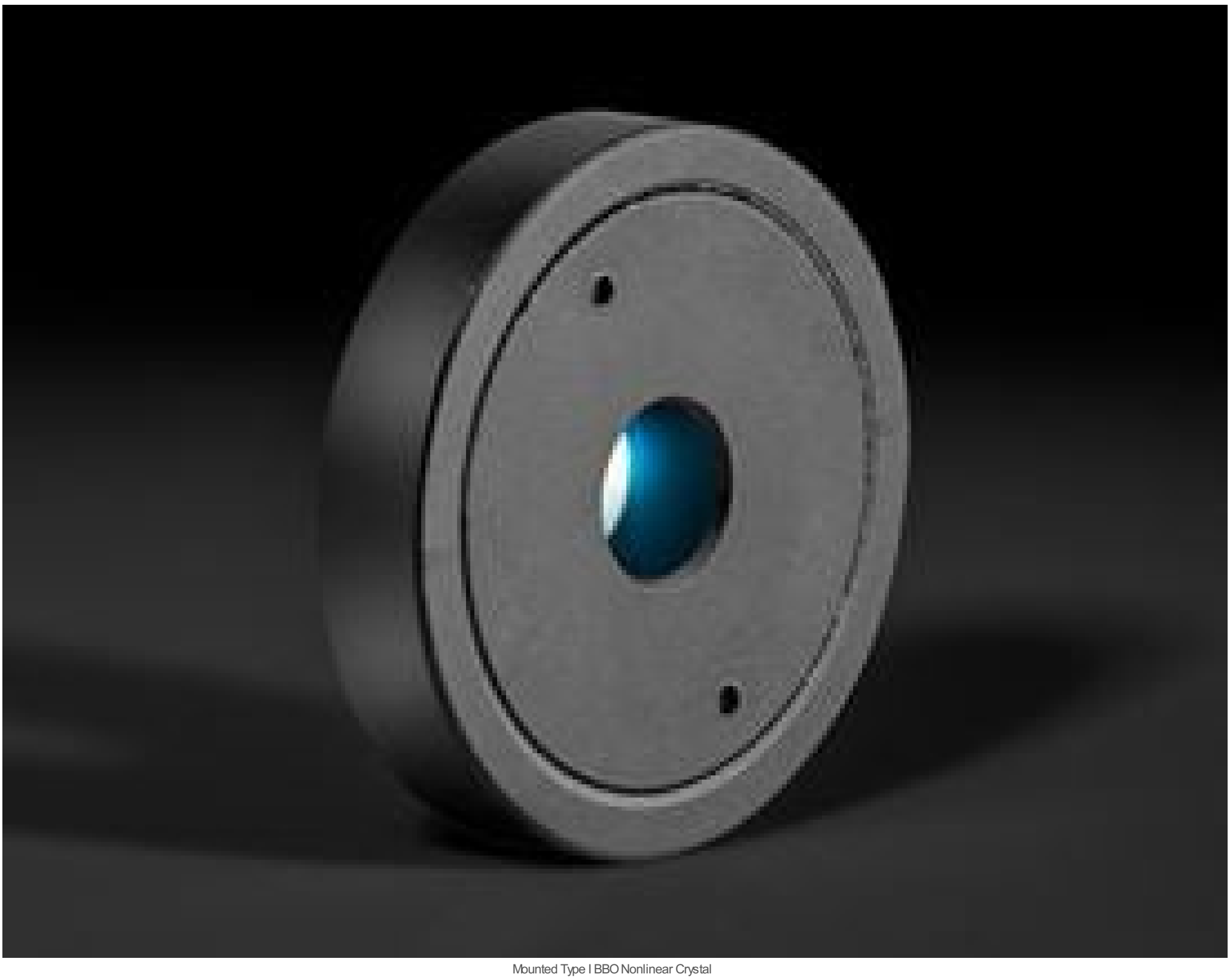
10 x 10 x 0.5mm, 800nm SHG, Type I BBO Nonlinear Crystal



Mounted Type I BBO Nonlinear Crystal

Stock **#11-166** CONTACT US

- 1 + **MRP ₹1,17,351**

Price inclusive of all taxes

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Volume Pricing	
Qty 1-2	**₹1,17,351** each
Qty 3+	**₹1,03,014** each
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General

Type:
Nonlinear Crystal

Typical Applications:
SHG @ 800nm, Type I

Note:
Mount is 25.4mm Dia., 5mm Thick Unthreaded Black Anodized Metal Mount (see drawing for more information)

Crystal Type:

BBO

Protective Chamfer:
<0.1mm x 45°

Physical & Mechanical Properties

Dimensions (mm):
10.0 x 10.0 +0.0/-0.1

Thickness (mm):
0.50 +0.0/-0.1

Clear Aperture CA (mm):
9.40

Parallelism (arcsec):
<20

Perpendicularity (arcmin):
<5

Optical Properties

Surface Quality:
20-10

Coating:
AR Coating

Design Wavelength DWL (nm):
800

Surface Flatness (P-V):
λ/8

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

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

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

Orientation Θ/Φ (°):
29.2/90

Threading & Mounting

Mount:
Mounted

Mount Thickness (mm):
5 (unthreaded)

Mount Diameter (mm):
25.4

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 247:
Compliant

Country of Origin:
Lithuania

Imported By:
Edmund Optics India Private Limited
267, Greystone Building, Second Floor,
6th Cross Rd, Binnamangala,
Stage 1, Indiranagar, Bengaluru,
Karnataka, India 560038
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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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