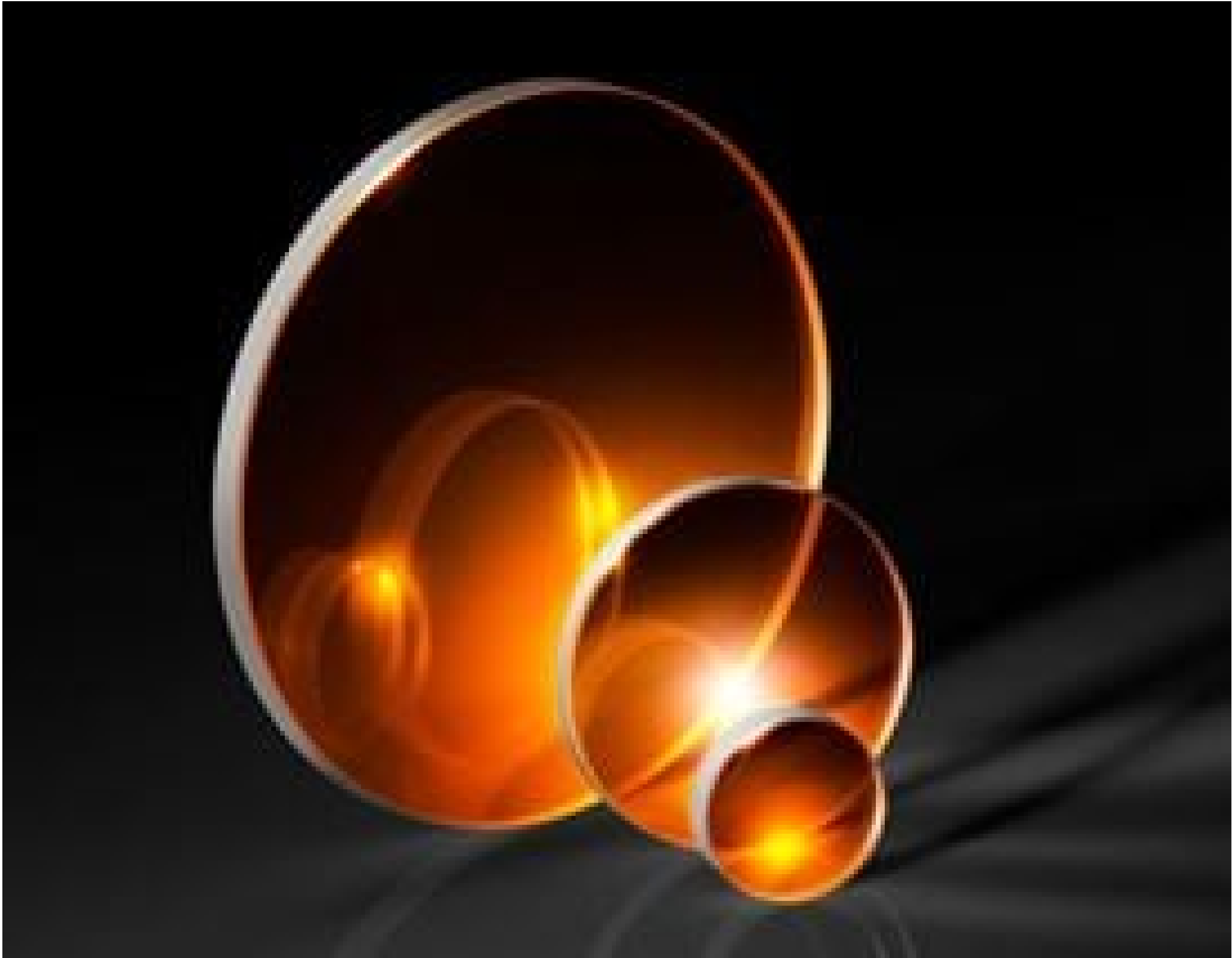


50.8mm Dia., 3.18mm Thick, Uncoated, Laser Grade C-Axis Sapphire Window



Laser Grade C-Axis Sapphire Windows

Stock **#15-805** 12 In Stock

-

1

+

C\$1,022⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-10	C\$1,022.00 each
Qty 11+	C\$924.00 each
Need More?	Request Quote

Product Downloads

General

Type:

Protective Window

Physical & Mechanical Properties

45.00	Clear Aperture CA (mm):
50.80 +0.00/-0.10	Diameter (mm):
	Thickness (mm):

3.18 ±0.20	
<3	Parallelism (arcmin):
Protective as needed	Bevel:
Fine Ground	Edges:
0.27	Poisson's Ratio:
435	Young's Modulus (GPa):
1,900.00	Knoop Hardness (kg/mm²):
Optical Properties	
Uncoated	Coating:
Sapphire (Al ₂ O ₃)	Substrate: ☐
1.77	Index of Refraction (n _d):
10-5	Surface Quality:
<i>λ</i> /10 over 25.4mm of Clear Aperture	Transmitted Wavefront, P-V:
72.24	Abbe Number (v _d):
0	Birefringence (n _o -n _e):
C-axis	Axis Orientation:
200 - 5500	Wavelength Range (nm):
Material Properties	
3.97	Density (g/cm³):
8.8	Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):
Regulatory Compliance	
View	Certificate of Conformance:

Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

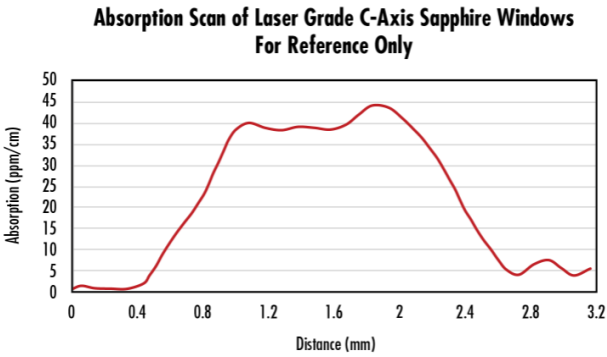
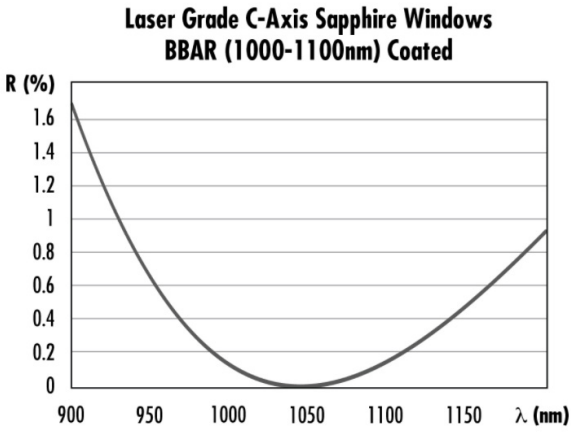
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- C-Axis Cut Sapphire to Eliminate Birefringence
- 10-5 Surface Quality and *λ*/10 TWFD
- Uncoated or IBS AR Coated for 1000-1100nm
- Ideal for High Power Laser Applications

Laser Grade C-Axis Sapphire Windows are precision optical windows cut to the C-axis of sapphire to eliminate the inherent birefringent properties of the material. C-axis sapphire, also referred to as C-plane sapphire or zero degree sapphire, provides high transmission from the ultraviolet (UV) to the mid-infrared, excellent chemical resistance, and high surface hardness second only to diamond. Featuring laser grade 10-5 surface quality and *λ*/10 transmitted wavefront distortion (TWFD), these windows are ideal for use in laser applications or for integration into laser systems. Laser Grade C-Axis Sapphire Windows are available uncoated or with an ion-beam sputtered (IBS) antireflection (AR) coating for 1000 - 1100nm, ideal for Nd:YAG, Yb:doped fiber, or Yb:YAG laser applications. Standard imperial sizes facilitate drop-in replacement into existing laser systems; please contact us if your application requires a Laser Grade C-Axis Sapphire Window with a custom size or coating.

Technical Information



Compatible Mounts