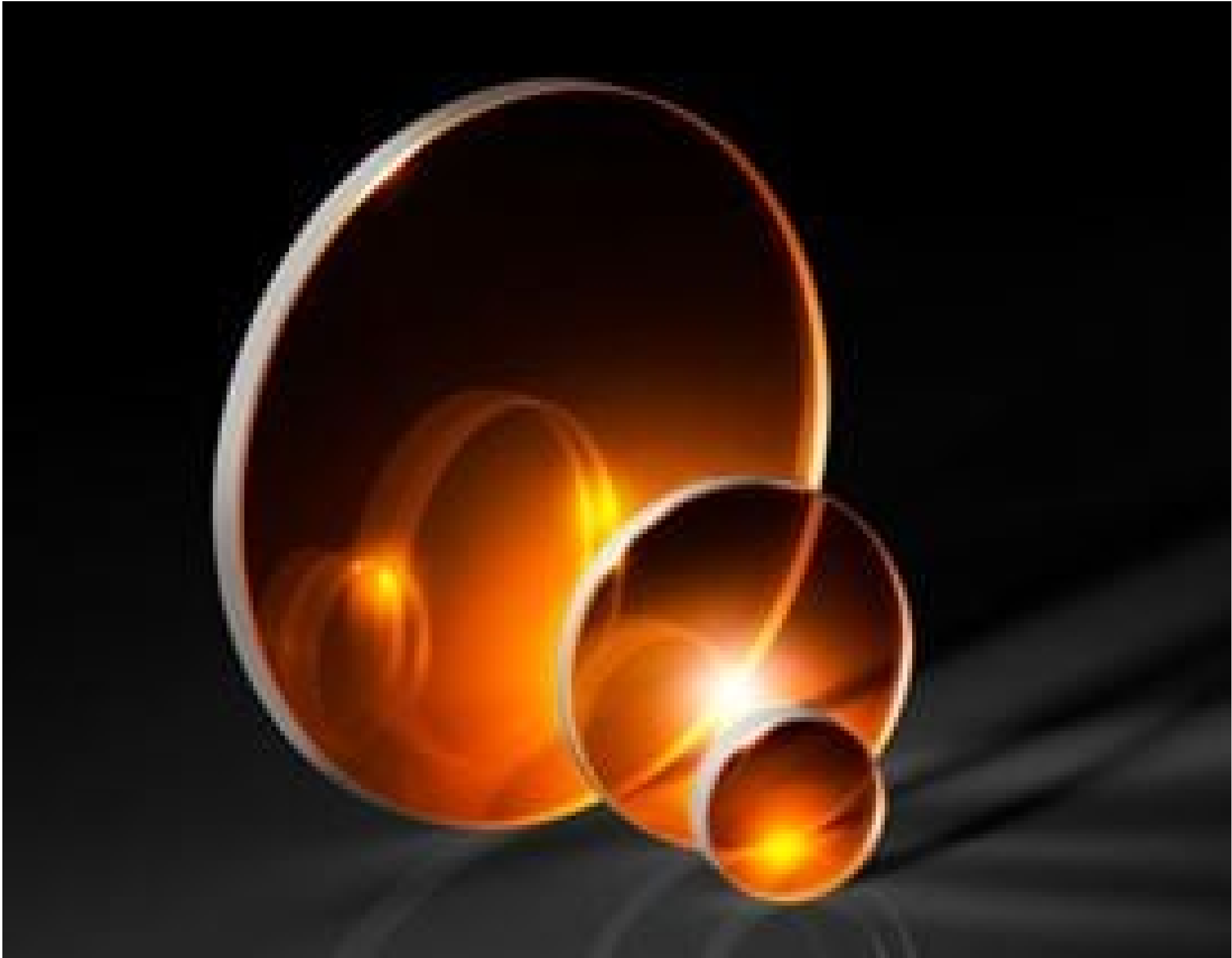


## 12.7mm Dia., 3.18mm Thick, Uncoated, Laser Grade C-Axis Sapphire Window



Laser Grade C-Axis Sapphire Windows

Stock **#15-803** **12 In Stock**

-

1

+

S\$345<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-10       | S\$345.80 each                |
| Qty 11+        | S\$310.80 each                |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Type:

Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):

11.00

Diameter (mm):

12.70 +0.00/-0.10

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 <sub>2</sub> O <sub>3</sub> ) | Substrate: <input type="checkbox"/> |

|      |                                        |
|------|----------------------------------------|
| 1.77 | Index of Refraction (n <sub>d</sub> ): |
| 10-5 | Surface Quality:                       |

|                                  |                                |
|----------------------------------|--------------------------------|
| <i>λ</i> /10 over Clear Aperture | Transmitted Wavefront, P-V:    |
| 72.24                            | Abbe Number (v <sub>d</sub> ): |

|        |                                                  |
|--------|--------------------------------------------------|
| 0      | Birefringence (n <sub>o</sub> -n <sub>e</sub> ): |
| C-axis | Axis Orientation:                                |

|            |                        |
|------------|------------------------|
| 200 - 5500 | Wavelength Range (nm): |
|------------|------------------------|

Material Properties

|      |                                                              |
|------|--------------------------------------------------------------|
| 3.97 | Density (g/cm³):                                             |
| 8.8  | Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C): |

Regulatory Compliance

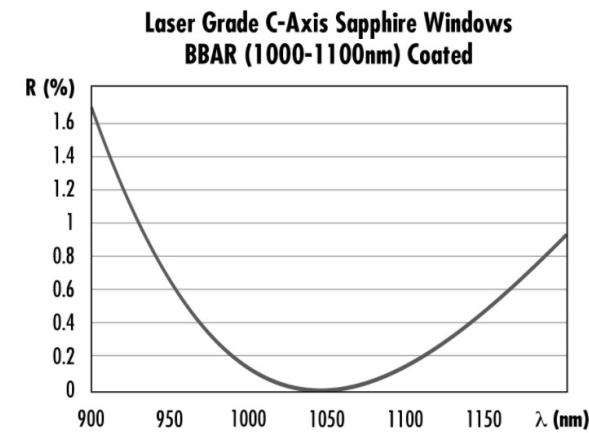
|                      |                             |
|----------------------|-----------------------------|
| <a href="#">View</a> | Certificate of Conformance: |
|----------------------|-----------------------------|

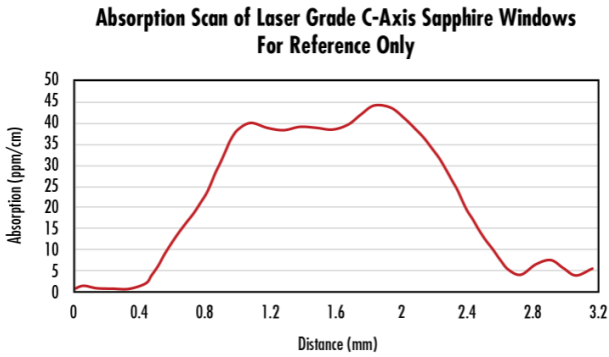
## Product Details

- 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





## 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](#).

## Compatible Mounts