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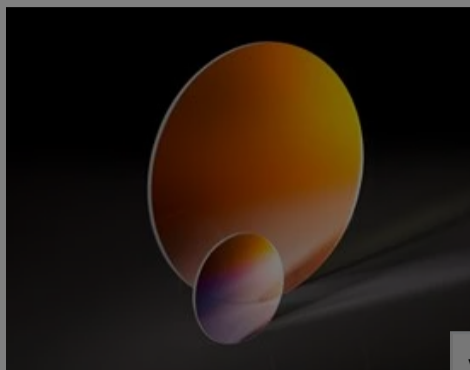
**TECHSPEC®**

50.8mm Dia., 95°

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region: European Union

Submit



Stock #11-742 **4 In Stock**

1

€315<sup>.00</sup>

ADD TO CART

Volume Pricing	
Qty 1-5	€315,00 each
Qty 6-25	€284,00 each
Qty 26-49	€267,00 each
Need More?	<a href="#">Request Quote</a>

Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:step
- Curve:pdf
- PDF Drawing:pdf
- IGES:igs
- eDrawing:eprt
- EO Spec Sheet
- [Download All](#)

General

Type: Ultrafast Window

Type of Window: Glass

Physical & Mechanical Properties

Diameter (mm): 50.80 +0.00/-0.10

Thickness (mm): 1.00 ±0.10

Bevel: Protective as needed

Clear Aperture (%): 90

Edges: Fine Ground

Parallelism (arcsec): ≤30

Poisson's Ratio: 0.16

Young's Modulus (GPa): 73

Knoop Hardness (kg/mm<sup>2</sup>): 522.00

Optical Properties

Coating: BBAR (950-1150nm)

Design Wavelength DWL (nm): 1030

Substrate: [Fused Silica](#) (Corning 7980)

Index of Refraction (n<sub>d</sub>): 1.458

Surface Quality: 20-10

Transmitted Wavefront, P-V: λ/6

Abbe Number (v<sub>d</sub>): 67.8

Coating Specification: R<sub>abs</sub> <0.15% @ 950 - 1150nm

**Wavelength Range (nm):** 950 - 1150

**Damage Threshold, By Design:** 10 J/cm<sup>2</sup> @ 532nm, 20ns, 20Hz

## Material Properties

**Density (g/cm<sup>3</sup>):** 2.20

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**Fused Silica Grade:** 7979 0G

## Regulatory Compliance

**RoHS 2015:** **Compliant**

**Reach 219:** **Compliant**

**Certificate of Conformance:** **View**

## Need different specs or modifications?

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

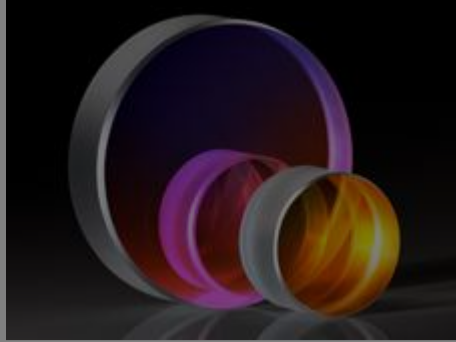
- 1mm Thickness for Limited GDD
- Low Loss Broadband IBS Anti-Reflection Coating
- Designs for Wavelengths from 370nm to 2200nm
- Coating GDD of  $\pm 30\text{fs}^2$
- UV or IR Grade Fused Silica Substrates

TECHSPEC® Ultrafast Thin Windows are designed with a 1mm thickness to have limited group delay dispersion (GDD), making them ideal for ultrafast laser applications. These thin windows are available coated on both surfaces with an ion-beam sputtered (IBS) broadband antireflection coating optimized to provide low reflectance at wavelength ranges between 370nm to 2.2 $\mu\text{m}$ . The IBS coating process also provides these windows with lower absorption losses and scatter than conventionally coated anti-reflection windows. TECHSPEC Ultrafast Thin Windows can also be used in general optical applications that require high-performance optical windows with a small form factor. Uncoated Thin Window substrates (UV Fused Silica or IR Grade Fused Silica) are available to offer the flexibility of custom coatings to meet your application requirements, please contact us for more information.

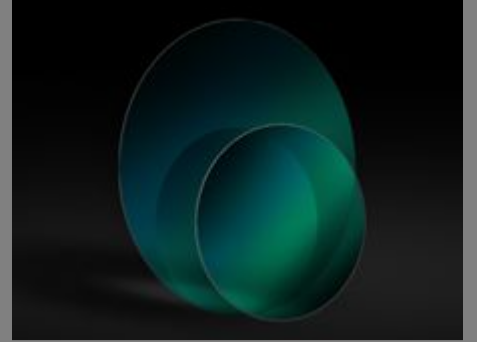
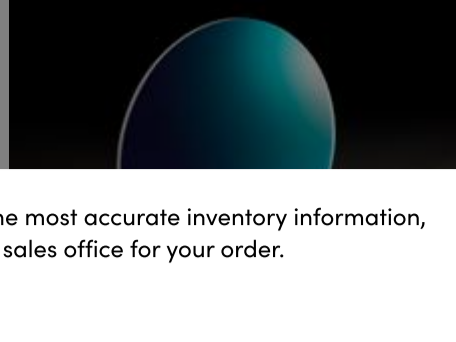
IR grade fused silica differs from UV grade fused silica by its reduced amount of OH<sup>-</sup> ions, resulting in higher transmission throughout the NIR spectrum and reduction of transmission in the UV spectrum.

## Technical Information

## Related Products



Ultrafast Optics



Ultra-Thin N-BK7 Windows

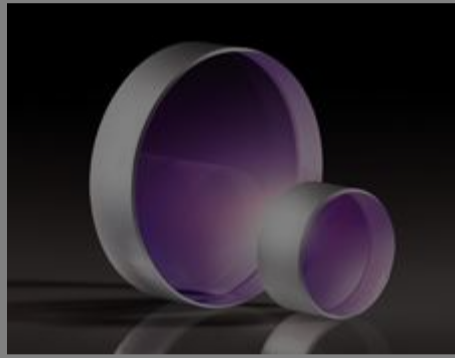
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### Frequently Purchased Together



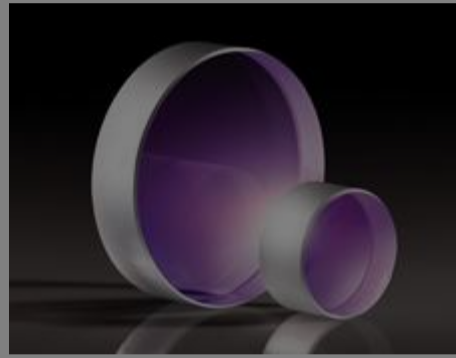
#33-362 - 25.0mm Dia. x 200.0mm FL, NIR I Coated, Plano-Convex Lens  
**€47,50**

Qty



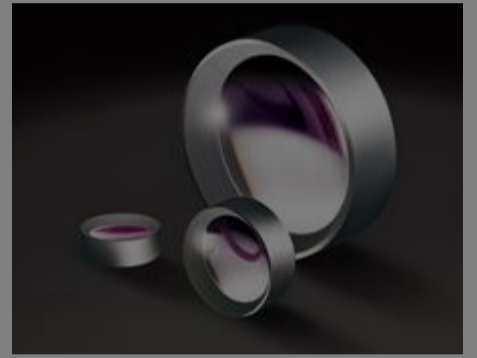
#48-204 - 12.5mm Dia., 3.00mm Thick, 266nm, λ/10 Fused Silica Window  
**€147,00**

Qty



#48-210 - 12.5mm Dia., 3.00mm Thick, 1064nm, λ/10 Fused Silica Window  
**€147,00**

Qty







#49-527 - 12.0mm Diameter x -18 FL, NIR I Coated, Plano-Concave Lens  
**€48,25**

Qty

### Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	50.8mm Optic Dia., Optic Mount	Fixed		#64-569	€49,25 <a href="#">Request Quote</a>	12 In Stock <input type="text" value="1"/>
	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	€108,00 <a href="#">Request Quote</a>	CONTACT US <input type="text" value="1"/>
	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	€116,00 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., Optical Cell Assembly	Fixed		#36-465 <b>CLEARANCE</b>	€119,95 <a href="#">Request Quote</a>	2 In Stock <input type="text" value="1"/>
	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	€120,00 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-957	€308,00 <a href="#">Request Quote</a>	1 In Stock <input type="text" value="1"/>
	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	€410,00 <a href="#">Request Quote</a>	CONTACT US <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#55-000	€510,00 <a href="#">Request Quote</a>	7 In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., X Translating Mount				€605,00	20+ In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., Optical Mou					10 In Stock <input type="text" value="1"/> 

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Check out our full selection of mounts [here](#).

# Resources

## Media Type

- Application Note
- Technical Tool
- Video
- Trending in Optics
- Published Article
- FAQ
- Glossary

**APPLICATION NOTE**

### Anti-Reflection (AR) Coatings

**APPLICATION NOTE**

### An Introduction to Optical Coatings

**CASE STUDIES**

### Laser Optics for Eye Surgery

**APPLICATION NOTE**

### Basics of Ultrafast Lasers

**TECHNICAL TOOL**

### Beam Displacement Calculator

**APPLICATION NOTE**

### Understanding Optical Windows

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