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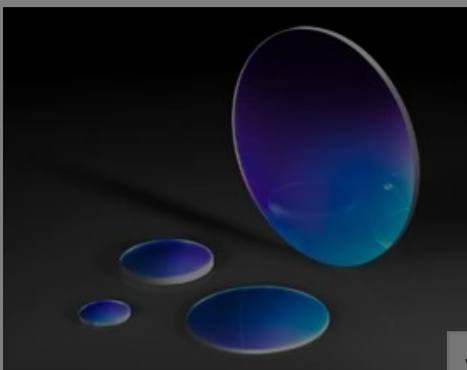
TECHSPEC®

50.8mm Dia., 1mm Thick

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Select Your Country/Region: European Union

Submit



Stock #25-395 **1 In Stock**

1

€408^{.00}

ADD TO CART

Volume Pricing

Qty 1-24	€408,00 each
Qty 25-50	€312,00 each
Qty 51-99	€306,00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

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

General

Type: Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):	45.72	Diameter (mm):	50.80 ±0.05
Thickness (mm):	1.00 ±0.05	Parallelism (arcmin):	≤3.5
Bevel:	Protective as needed	Clear Aperture (%):	≥90
Edges:	Fine Ground	Poisson's Ratio:	0.27
Young's Modulus (GPa):	435	Knoop Hardness (kg/mm ²):	1,900.00

Optical Properties

Coating:	MgF ₂ (400-700nm)	Substrate: ①	Sapphire (Al ₂ O ₃)
Index of Refraction (n _d):	1.77	Surface Quality:	80-50
Abbe Number (v _d):	72.24	Birefringence (n _o -n _e):	0.008 for Visible Light Orthogonal to Optical Axis
Axis Orientation:	Random	Coating Specification:	R _{avg} ≤1.75% @ 400 - 700nm
Wavelength Range (nm):	400 - 700	Surface Flatness (P-):	2λ (typical)

V):

Material Properties

Density (g/cm³): 3.97

Coefficient of Expansion: 5.4 (Parallel to

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Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: **View**

Reach 235: **Compliant**

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

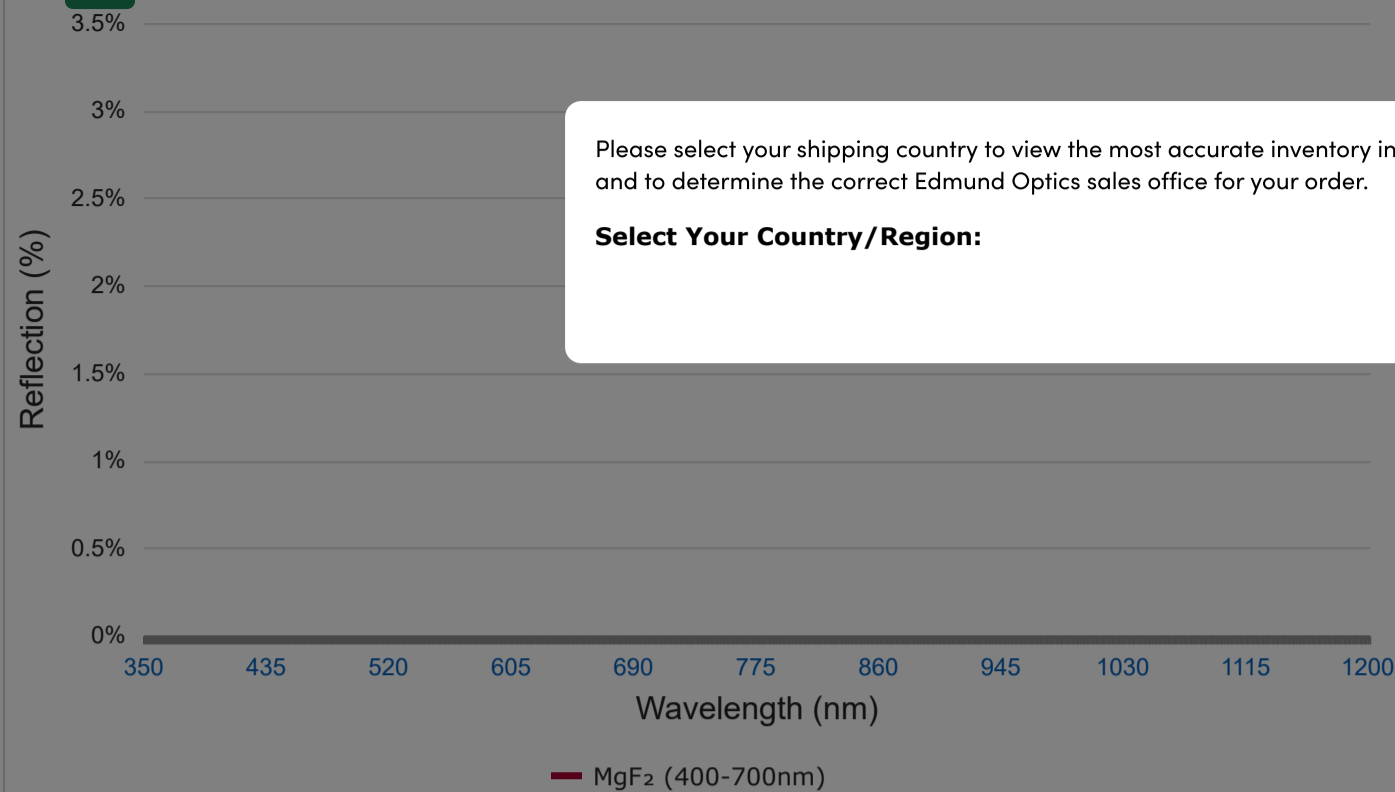
- Features Extreme Surface Hardness Chemical Resistance
- Transmits Wavelengths Ranging From UV to Mid-Infrared
- Thinner and Stronger than Standard Glass Windows
- Anti-Reflection Coating Options Covering 350 - 5000nm Available

TECHSPEC® Sapphire Windows are manufactured from single crystal sapphire, making them ideal for demanding applications (such as laser systems) because of their extreme surface hardness, high thermal conductivity, high dielectric constant and resistance to common chemical acids and alkalis. Sapphire is the second hardest crystal next to **diamond** and, because of their structural strength, sapphire windows can be made much thinner than other common windows with improved transmittance. Chemically, sapphire is single crystal aluminum oxide (Al₂O₃) and is useful in a transmission range from UV to mid-infrared or 330 - 5500nm when uncoated. TECHSPEC® Sapphire Windows are available with anti-reflection (AR) coatings to improve performance in the visible, NIR, and IR spectra with coating options covering 350 - 5000nm.

Technical Information

Coating Curves

MgF₂ (400-700nm)



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SHIFT + SELECT an area on CURVE to zoom

Please note that coating performance outside each product's specified design range is theoretical and may vary.

Related Products



Cage System Optical Lens Mounts

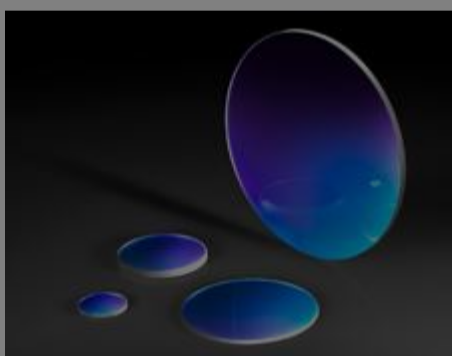


C, S, and T-Mount Circular Optic Mounts



PUROSOL™ Optical Cleaner

Frequently Purchased Together



#25-394 - 50mm Dia., 1mm Thick, MgF₂ AR Coated Sapphire Window
€408,00

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
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MORE+



50.8mm Optic Dia., Optic Mount

Fixed

#64-569

€49,25
 Request Quote

12 In Stock

1



	Title	Type	Compare	Stock Number	Price	Buy
MORE+	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder				€108,00	CONTACT US 1
MORE+	7.0 - 67.0 C Height, English Bar-Type Op Holder					20+ In Stock 1
MORE+	50.0/50.8mm Optic Dia., Optical Cell Assembly	Fixed		#36-465 CLEARANCE	€119,95 Request Quote	2 In Stock 1
MORE+	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	€120,00 Request Quote	20+ In Stock 1
MORE+	50.0/50.8mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-957	€308,00 Request Quote	1 In Stock 1
MORE+	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	€410,00 Request Quote	CONTACT US 1
MORE+	50.0/50.8mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#55-000	€510,00 Request Quote	7 In Stock 1
MORE+	50.0/50.8mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-960	€605,00 Request Quote	20+ In Stock 1
MORE+	50.0/50.8mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-778	€840,00 Request Quote	10 In Stock 1

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

Resources

Media Type

- Application Note
- Technical Tool
- Video
- Glossary
- FAQ

APPLICATION NOTE
Anti-Reflection (AR) Coatings

APPLICATION NOTE
An Introduction to Optical Coatings

TECHNICAL TOOL
Beam Displacement Calculator

APPLICATION NOTE

VIDEO

APPLICATION NOTE

Understanding
Optical
Windows

Optical
Windows
Review

Optical Glass

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