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TECHSPEC®

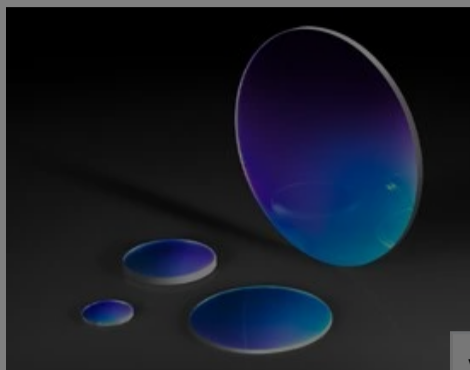
25mm Dia., 1mm Thick

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Select Your Country/Region: European Union

Submit

Window



Stock #20-681 **3 In Stock**

1

€110^{.00}

ADD TO CART

Volume Pricing	
Qty 1-24	€110,00 each
Qty 25-50	€85,00 each
Qty 51-99	€83,00 each
Need More?	Request Quote

Product Downloads	
STEP:step	PDF Drawing:pdf
IGES:igs	eDrawing:eprt
EO Spec Sheet	Download All

Prices shown are exclusive of VAT/local taxes

General

Type: Protective Window

Type of Window: Crystal

Physical & Mechanical Properties

Clear Aperture CA (mm): 22.50

Diameter (mm): 25.00 ±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/mm²): 1,900.00

Optical Properties

Coating: MgF₂ (400-700nm)

Substrate: Sapphire (Al₂O₃)

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](#).

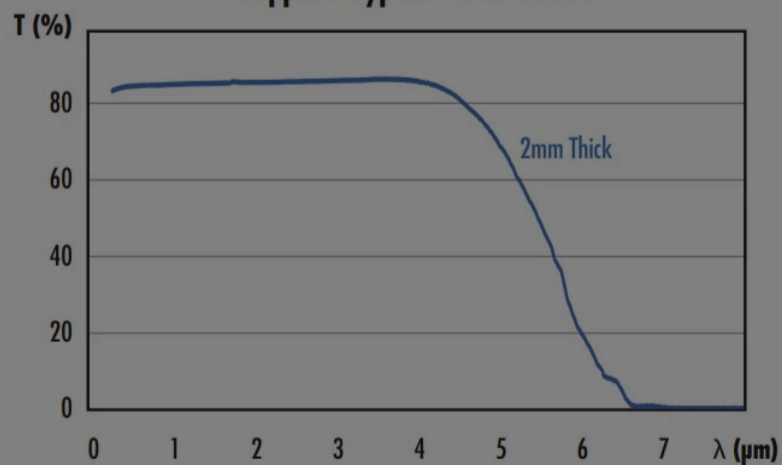
Product Details

- 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

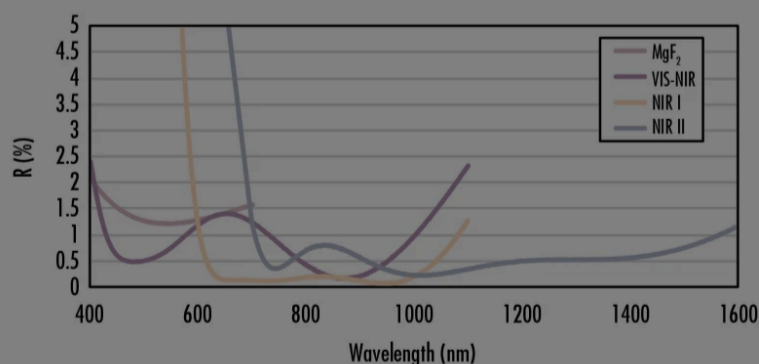
TECHSPEC® Sapphire Windows are manufactured from single crystal sapphire, making them ideal for demanding applications (such as laser systems) because of their extreme surface hardness, high thermal conductivity, high dielectric constant and resistance to common chemical acids and alkalis. Sapphire is 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

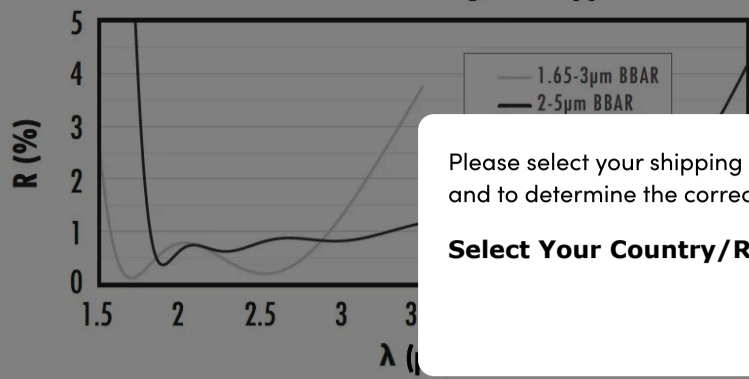
Sapphire Typical Transmission



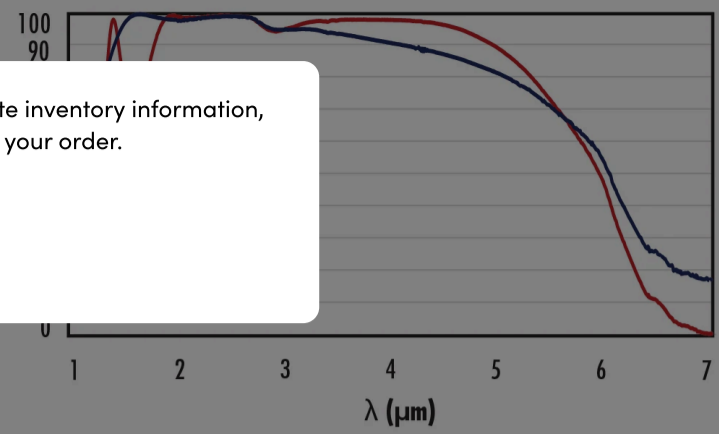
Standard Visible & NIR AR Coatings on Sapphire



Infrared BBAR Coatings on Sapphire



Infrared AR Coated Sapphire Windows 1mm Thickness

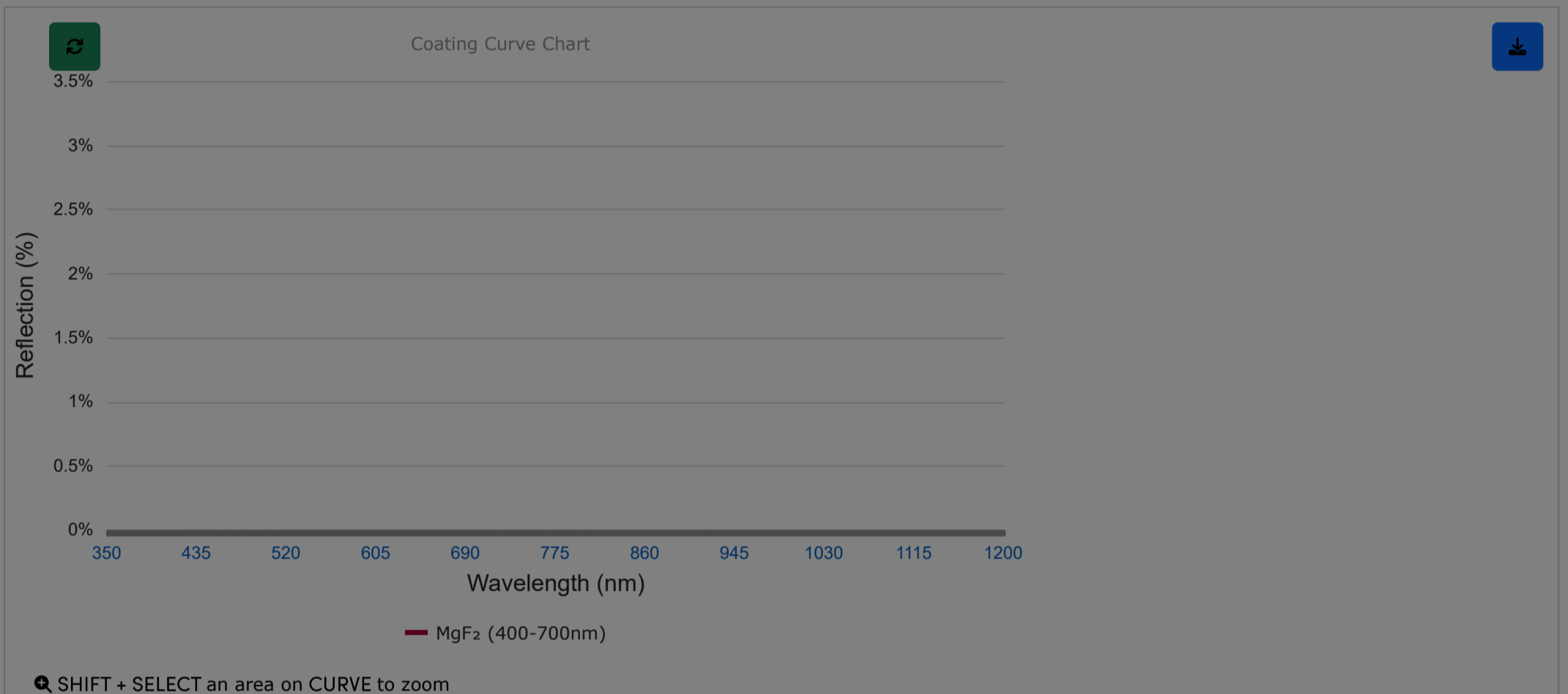


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Coating Curves

MgF₂ (400-700nm)



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





































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Select Your Country/Region:

Sapphire window
€110,00

Qty 

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
 	25.0/25.4mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-866	€43,50 Request Quote	14 In Stock <input type="text" value="1"/> 
 	2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-668	€63,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	€83,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	25.0/25.4mm Optic Dia., Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#58-851	€98,50 Request Quote	3 In Stock <input type="text" value="1"/> 
 	5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-529	€102,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	7.0 - 40.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-676	€106,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	25.0/25.4mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-854	€107,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	€108,00 Request Quote	CONTACT US <input type="text" value="1"/> 
 	19.5 - 108.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-670	€114,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	€116,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	€120,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-077	€157,00 Request Quote	5 In Stock <input type="text" value="1"/> 

	Title	Type	Compare	Stock Number	Price	Buy
	 25.0/25.4mm Optic Dia., Stainle Steel Kinem Mount, 2-Sc				€161,00	4 In Stock <input type="text" value="1"/> 
	 25.0/25.4mm Optic Dia., Stainle Steel Kinem Mount, 3-Sc					9 In Stock <input type="text" value="1"/> 
	 25.0/25.4mm Optic Dia., Kinematic Mirror Mount	Adjustable - Tip-Tilt		#55-003	€336,00 Request Quote	14 In Stock <input type="text" value="1"/> 
	 25.0/25.4mm Optic Dia., Kinematic Mirror Mount with Micrometer	Adjustable - Tip-Tilt		#55-456	€361,00 Request Quote	3 In Stock <input type="text" value="1"/> 
	 5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	€410,00 Request Quote	CONTACT US <input type="text" value="1"/> 

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

Resources

