

[All Products](#) / [Optics](#) / [Windows](#) / [High Durability Anti-Reflection](#)

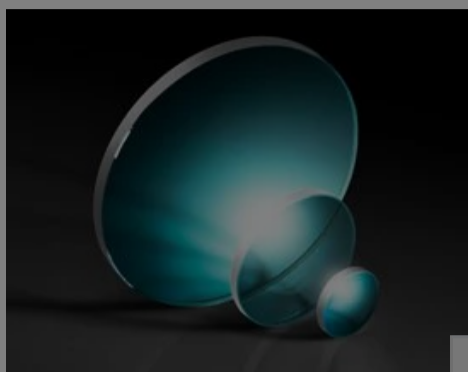
[See all 12 Products in Family](#)

6.35mm Dia., 0.5mm Thick Coated Sapphire Windows

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



High Durability Anti-Reflection (AR)
Coated Sapphire Windows

Stock #18-468 **13 In Stock**

1

€151^{,00}

ADD TO CART

Volume Pricing	
Qty 1-10	€151,00 each
Qty 11-25	€130,00 each
Qty 26-49	€129,00 each
Need More?	Request Quote

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: Protective Window	Type of Window: Crystal
--------------------------------	--------------------------------

Physical & Mechanical Properties

Clear Aperture CA (mm): 5.72	Diameter (mm): 6.35 ±0.05
Thickness (mm): 0.50 ±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: Hardened BBAR (2000-5000nm)	Substrate: 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} <1.5% @ 2000 - 5000nm R _{abs} <2.0% @ 2000 - 5000nm

Wavelength Range (nm):	2000 - 5000	Surface Flatness (P-V):	2λ (typical)
Coating Temperature (°F):	-80 to +160 per MIL-M-13508C Paragraph 4.4.4	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.</p> <p>Select Your Country/Region:</p> </div>	
Material Properties			
Density (g/cm³):	3.97	Thermal Expansion CTE (10⁻⁶/°C):	
Environmental & Durability Factors			
Coating Abrasion:	Severe, per MIL-C-675C Paragraph 4.5.10	Coating Adhesion:	Per MIL-M-13508C Paragraph 4.4.6
Coating Humidity:	≥24 Hours per MIL-C-675C paragraph 4.5.8	Coating Salt Spray:	≥24 Hours per MIL-C-675C paragraph 4.5.9
Coating Salt Solubility:	≥24 Hours Immersion per MIL-C-675C paragraph 4.5.7		
Regulatory Compliance			
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

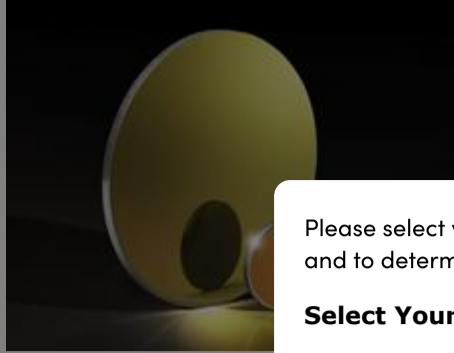
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- Achieves Severe Abrasion Requirements of MIL-C-675C
- Low Reflection Coatings for 400 - 1100nm or 2000 - 5000nm
- Ideal for Harsh Environments Requiring Thin Optics
- **Uncoated Sapphire Windows** are Also Available

High Durability Anti-Reflection (AR) Coated Sapphire Windows are designed for applications requiring the ruggedness of sapphire with AR coatings designed to survive severe abrasion. The AR coatings on these sapphire windows are designed to withstand temperature cycling from -80 to +160°F, salt spray for a continuous period of 24 hours, and salt solubility for an immersion period of 24 hours. Coating designs achieving the severe abrasion requirements of MIL-C-675C for VIS-NIR and MWIR applications are available, making them ideal for use in harsh environments. High Durability Anti-Reflection (AR) Coated Sapphire Windows are used in aerospace, defense, and industrial applications, as well as any optical application requiring thin, durable protective windows.

Related Products



ISP Optics Diamond-Like Coating (DLC) Coated Silicon



100) Anti-reflective Coatings

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:

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

Understanding Optical Windows

VIDEO

Optical Windows Review

APPLICATION NOTE

Optical Glass

[View More](#)