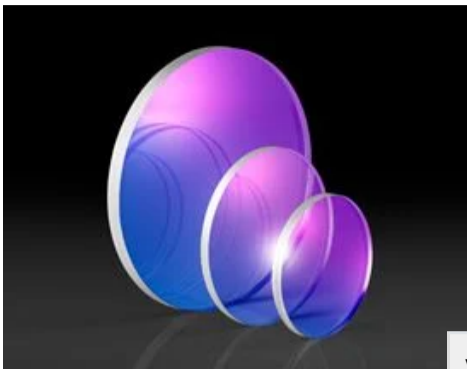


TECHSPEC® 50.8mm Diameter Uncoated, Calcium Fluoride Window



TECHSPEC Calcium Fluoride (CaF₂) Windows

Stock #11-875 20+ In Stock

1 C\$413^{.00}

ADD TO CART

Volume Pricing	
Qty 1-10	C\$413.00 each
Qty 11-25	C\$365.40 each
Qty 26-49	C\$344.40 each
Need More?	Request Quote

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

General

Type: Protective Window	Type of Window: Crystal
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Physical & Mechanical Properties

Clear Aperture CA (mm): 45.72	Diameter (mm): 50.80 +0.0/-0.1
Thickness (mm): 3.00 ±0.1	Parallelism (arcmin): <1
Bevel: Protective as needed	Clear Aperture (%): 90
Edges: Fine Ground	Poisson's Ratio: 0.26
Young's Modulus (GPa): 75.8	Knoop Hardness (kg/mm²): 158.30

Optical Properties

Coating: Uncoated	Substrate: Calcium Fluoride (CaF ₂) Vacuum UV Grade
Index of Refraction (n_d): 1.434	Surface Quality: 40-20
Abbe Number (v_d): 94.99	Axis Orientation: Random
Wavelength Range (nm): 200 - 7000	Surface Flatness (P-V): λ/2

Material Properties

Density (g/cm³): 3.18	Coefficient of Thermal Expansion CTE (10⁻⁶/°C): 18.85
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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

- Low Absorption, High Transmission UV Grade Calcium Fluoride
- Low Index of Refraction
- AR Coatings Spanning 250 - 5000nm Available
- [Calcium Fluoride \(CaF₂\) Wedged Windows](#) also Available

TECHSPEC® Calcium Fluoride (CaF₂) Windows offer a low index of refraction, providing high transmission from 200 - 7000nm when used uncoated. To further increase transmission and reduce back reflections, a variety of AR coatings are available spanning wavelength regions from the Ultra-Violet (UV) to the Mid-Wave Infrared (MWIR). The high bulk damage threshold of calcium fluoride coupled with its low absorption makes it a popular choice for use with laser systems, including excimer lasers. TECHSPEC® Calcium Fluoride (CaF₂) Windows are ideal for use as protective windows for gas detectors operating in the Vacuum UV (VUV) and MWIR, UV spectroscopy systems, cryogenically cooled thermal imaging systems, and as substrates for coatings requiring wideband substrate transmission.

Note: Calcium fluoride is a relatively soft optical material and is more susceptible to scratches than typical glass windows. Calcium fluoride is also susceptible to thermal shock.

Technical Information

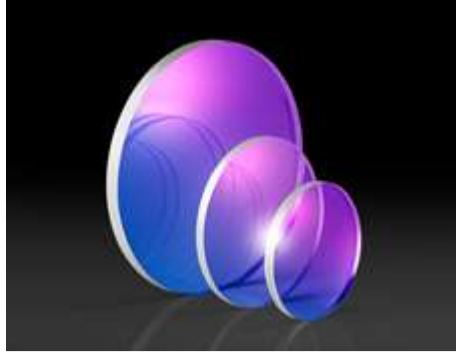
Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.

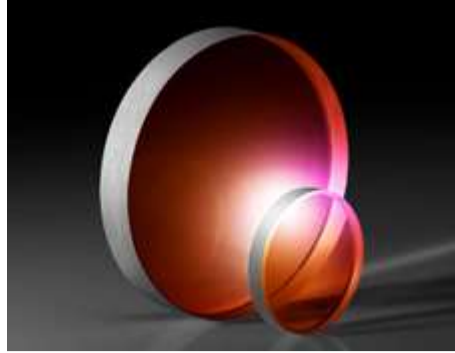


Component Handling Tools

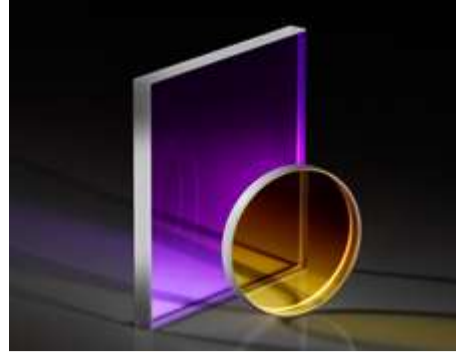
Related Products



Calcium Fluoride Optics



ISP Optics Calcium Fluoride (CaF₂) Wedged Windows

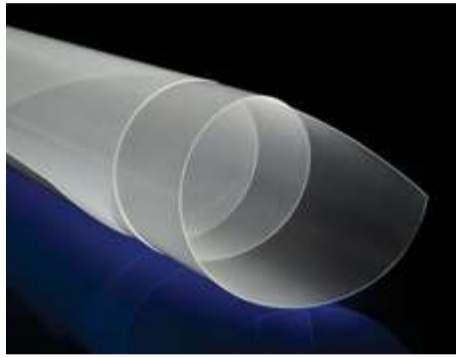


1λ UV Fused Silica Windows



Magnesium Fluoride (MgF₂) Windows

Frequently Purchased Together



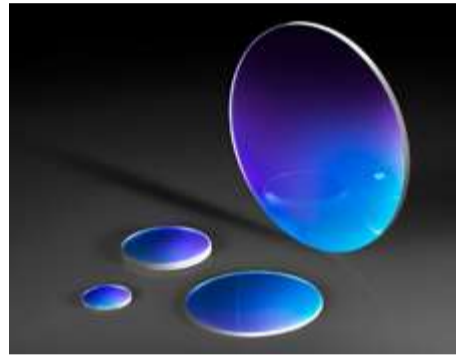
#32-806 - 6" x 6" Translucent, IR Material Window
C\$45.50

Qty



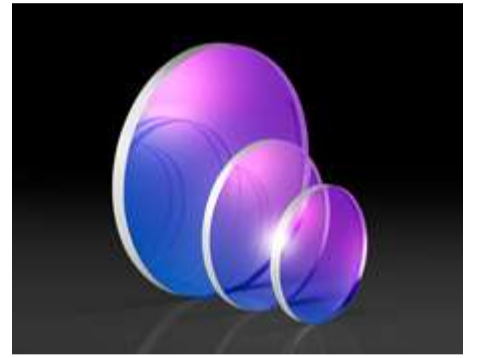
#32-818 - 2" Dia, 12" FL Protected Alum., Spherical Mirror
C\$239.40

Qty



#45-817 - 50.8mm Dia., 3.18mm Thick, Uncoated, Sapphire Window
C\$639.80

Qty






























#47-682 - 12.5mm Diameter Uncoated, Calcium Fluoride Window
C\$196.00

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	50.8mm Optic Dia., Optic Mount	Fixed		#64-569	C\$68.95 Request Quote	12 In Stock <input type="text" value="1"/>
	9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	C\$116.20 Request Quote	20+ In Stock <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-867	C\$134.40 Request Quote	CONTACT US <input type="text" value="1"/>
	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	C\$151.20 Request Quote	CONTACT US <input type="text" value="1"/>
	19.5 - 108.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-670	C\$159.60 Request Quote	20+ In Stock <input type="text" value="1"/>
	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	C\$162.40 Request Quote	20+ In Stock <input type="text" value="1"/>
	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	C\$168.00 Request Quote	20+ In Stock <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., Optical Cell Assembly	Fixed		#36-465 CLEARANCE	C\$179.93 Request Quote	2 In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
 	50.0/50.8mm Optic Dia., Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#58-852	C\$189.00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-855	C\$219.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#26-816	C\$344.40 Request Quote	12 In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#26-819	C\$375.20 Request Quote	CONTACT US <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-957	C\$431.20 Request Quote	1 In Stock <input type="text" value="1"/> 
 	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	C\$574.00 Request Quote	CONTACT US <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#55-000	C\$714.00 Request Quote	7 In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-960	C\$847.00 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-778	C\$1,176.00 Request Quote	10 In Stock <input type="text" value="1"/> 

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

Resources

Media Type

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

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

An Introduction to Optical Coatings

SCIENTIFIC PAPER

Advantages of using engineered chalcogenide...

VIDEO

Infrared Light

GLOSSARY

Short Wave Infrared (SWIR)

TECHNICAL TOOL

Beam Displacement Calculator

[View More](#)
