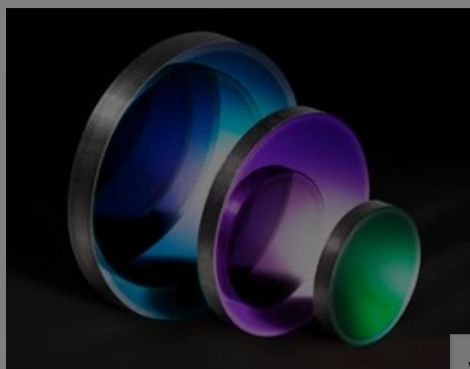


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TECHSPEC® 25mm



Germanium (Ge) 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

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1

€910⁰⁰

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Volume Pricing

Qty 1+ €910,00 each

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Product Downloads

- STEP:step
- Curve:pdf
- PDF Drawing:pdf
- IGES:igs
- eDrawing:eprt
- EO Spec Sheet
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General

Type: Protective Window

Type of Window: Crystal

Physical & Mechanical Properties

Clear Aperture CA (mm): 22.50

Diameter (mm): 25.00 +0.0/-0.1

Thickness (mm): 1.00 ±0.1

Parallelism (arcmin): <1

Dimensional Tolerance (mm): +0.0/-0.1

Bevel: Protective as needed

Clear Aperture (%): 90.00

Edges: Fine Ground

Poisson's Ratio: 0.28

Young's Modulus (GPa): 102.7

Knoop Hardness (kg/mm²): 780.00

Optical Properties

Coating: BBAR (8000-12000nm)

Substrate: Germanium (Ge)

Index of Refraction (n_d): 4.002 @ 11µm

Surface Quality: 60-40

Coating Specification: R_{avg} <3.0% @ 8 - 12µm

Wavelength Range (nm): 8000 - 12000

Surface Flatness (P-V): λ/10 @ 10.6µm

Material Properties

Density (g/cm³): 5.33

Coefficient of Thermal: 6.1

Regulatory Compliance

RoHS 2015: **Compliant**REACH 241: **Compliant**

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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

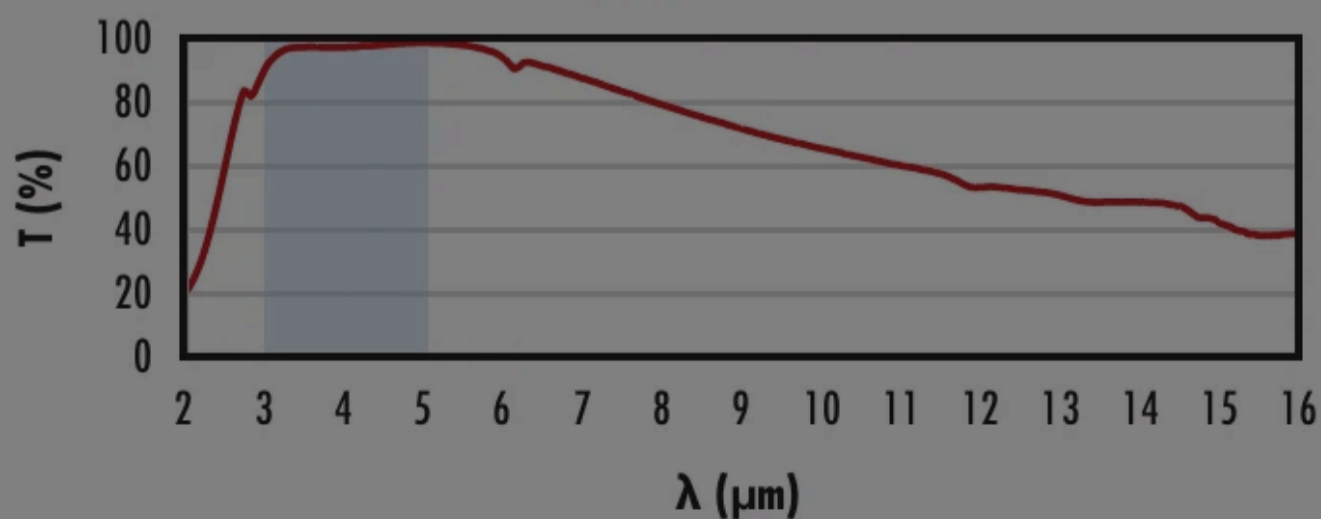
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- Uncoated or with AR Coatings Designed for a Variety of IR Ranges
- Minimal Chromatic Aberration Due to Low Dispersion
- Ideal for Infrared Applications Requiring Rugged Optics
- **DLC Coated Germanium Windows** are also Available
- Due to material supply chain disruptions with germanium, there may be increased lead times and price changes on our germanium products. For more information, please contact our [customer service team](#).
- Edmund Optics has limited remaining inventory of this part number and no raw material available to supply more once this is depleted. Please contact our Product Support Engineers to help with an alternate solution for your needs. Customer Service can provide you the latest price and availability.

TECHSPEC® Germanium (Ge) Windows are available off-the-shelf with three anti-reflection coating options: 3 - 5 μm for mid-infrared applications, 3 - 12 μm for broadband multispectral applications, or 8 - 12 μm for thermal imaging applications. Due to its high index of refraction (around 4.0 from 2 - 14 μm), an anti-reflection coating is recommended on these germanium windows for sufficient transmission in the region of interest. Germanium is subject to thermal runaway, meaning the transmission decreases as temperature increases. As such, TECHSPEC Germanium (Ge) Windows should be used at temperatures below 100°C. Germanium's high density (5.33 g/cm³) should be considered when designing for weight-sensitive systems. The Knoop Hardness of germanium (780) is approximately twice that of magnesium fluoride, making it ideal for infrared applications requiring rugged optics.

Technical Information

Ge with 3-5 μm AR Coating
Typical Transmission

Typical transmission of a 3mm thick Ge window with B (3000-5000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

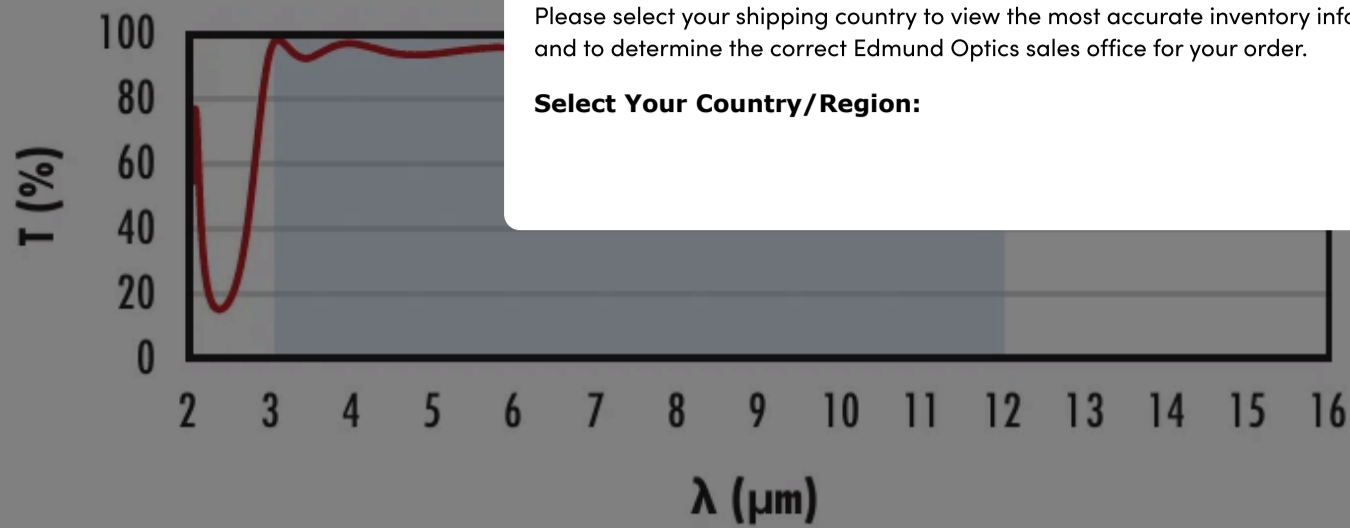
$R_{\text{avg}} < 3\%$ @ 3000 - 5000nm

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

Ge with 3-12 μ m AR Coating

Typical Transmission



Typical transmission of a 3mm thick Ge window with B (3000-12000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

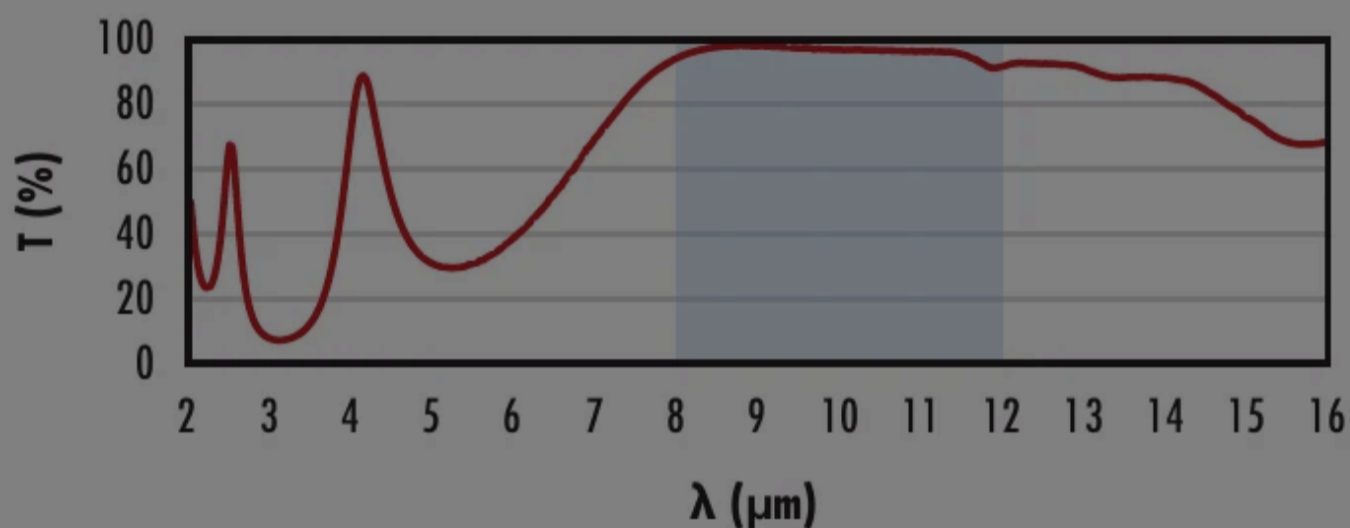
$$R_{avg} < 5.0\% @ 3 - 12\mu m$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

8-12 μ m AR Coated Germanium

Typical Transmission



The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} < 3.0\% @ 8 - 12\mu m$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

Special Handling

Germanium Optics Handling and Cleaning Guidelines

Germanium optics require special handling and cleaning procedures. Always wear gloves during handling to prevent contamination, and wash hands afterward. Avoid contact between Germanium dust and the eyes, skin, or clothing. When not in use, store optics sealed and covered at temperatures between 20°C and 25°C. Do not expose them to temperatures exceeding 100°C when in use.

Handling Guidelines

- Always wear **gloves** to prevent damage from skin oils.
- If Germanium dust is present, take the following precautions:
 - Wear safety glasses to protect eyes.
 - Use a dust mask or face mask to avoid inhalation.
 - Wear **gloves** to prevent skin contact.
- Maintain storage temperature between 20°C and 25°C with humidity below 30%.
- Wrap Germanium optics in a **lens cloth** or **pouch** and seal in a **container** when not in use.
- Germanium is brittle and heavy — always place it on soft surfaces and avoid dropping it.

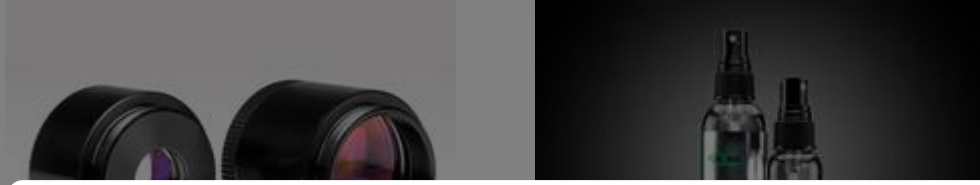
Approved Cleaning Solvents

- Ethanol
- Isopropyl Alcohol
- Methanol
- Reagent-Grade Acetone
- Liquid CO₂
- [Shop Now](#)

Related Products

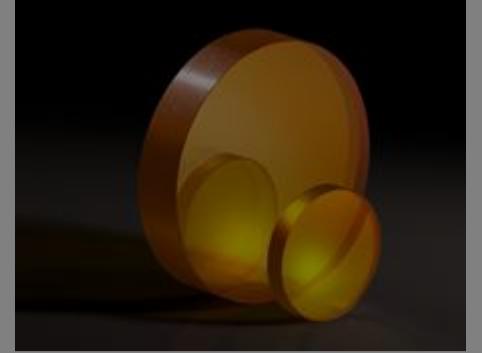


Cage System Optical Lens Mounts



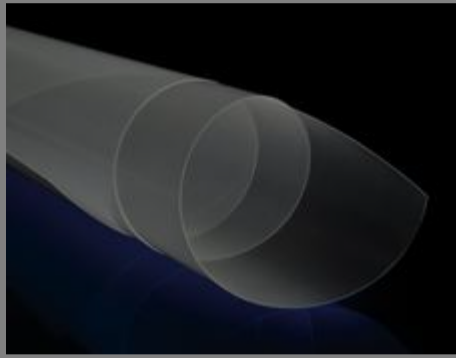
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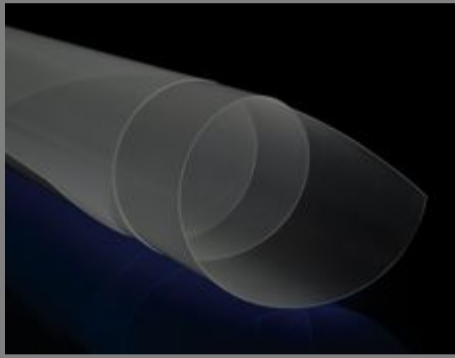
Zinc Selenide (ZnSe) Windows

Frequently Purchased Together



#32-806 - 6" x 6" Translucent, IR Material Window
€32,50

Qty



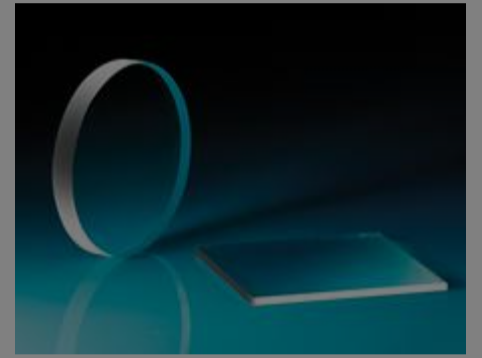
#32-807 - 6" x 6" White, IR Material Window
€32,50

Qty



#33-301 - 6mm UC Series Fixed Focal Length Lens
€260,00

Qty












#48-925 - 50.8 x 50.8 x 1mm High Efficiency Window
€28,50

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	25.0mm Optic Dia., Optic Mount	Fixed		#64-560	€32,75 Request Quote	CONTACT US <input type="text" value="1"/>
	25.0/25.4mm Optic Dia., Optical Cell Assembly	Fixed		#36-461 CLEARANCE	€95,95 Request Quote	2 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"/>
	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"/>
	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"/>
	25.0/25.4mm Optic Dia., X-Y	Adjustable - Linear (XY)		#62-956	€276,00 Request	CONTACT US <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	Translating Optic Mount				Quote	
MORE+ 	5.0 - 100.0mm Optic Dia., Centering J Clamp					CONTACT US 1 
MORE+ 	25.0/25.4mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#54-999	€461,00 Request Quote	4 In Stock 1 
MORE+ 	25.0/25.4mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-959	€540,00 Request Quote	6 In Stock 1 
MORE+ 	25.0/25.4mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-776	€755,00 Request Quote	2 In Stock 1 

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- 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

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