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25.4mm Dia., 4mm Thick, BBAR Coated, ISP Optics Barium Fluoride (BaF₂) Wedged Window (2000-5000nm)

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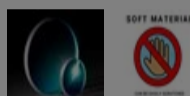
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Barium Fluoride (BaF₂) Wedged Window



Stock #23-719 **CLEARANCE** 2 In Stock

1

€308^{,95}

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Prices shown are exclusive of VAT/local taxes

General

Type: Protective Window

Type of Window: Crystal

Physical & Mechanical Properties

Clear Aperture CA (mm): 21.59

Diameter (mm): 25.40
+0.0/-0.13

Thickness (mm): 4.00 ±0.13

Bevel: Protective as needed

Clear Aperture (%): 85

Edges: Fine Ground

Poisson's Ratio: 0.34

Young's Modulus (GPa): 53

Knoop Hardness (kg/mm²): 82.00

Wedge Angle (arcmin): 30±15 arcmin

Optical Properties

Coating: BBAR (2000-5000nm)

Substrate: [Barium Fluoride \(BaF₂\)](#)

Index of Refraction (n_d): 1.478 @ 0.5µm
1.451 @ 5µm
1.401 @ 10µm

Surface Quality: 60-40

Abbe Number (v_d): 81.78

Axis Orientation: Random

Coating Specification: R_{avg} <1.5% @ 2000-5000nm
R_{abs} <3.0% @ 2000-5000nm
R_{avg} <1.75% @ 2000-4000nm

Wavelength Range (nm): 2000 - 5000

Surface Flatness (P-Value): 2λ @ 633nm

v):

Material Properties

Density (g/cm³): 4.89

Coefficient of 18.1

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Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

Reach 235: **Compliant**

Product Details

- 30 Arcmin Wedge
- Excellent Transmission from 200nm - 12µm
- Resistant to High-Energy Radiation
- **Precision Flat Barium Fluoride (BaF₂) Windows** Also Available

ISP Optics Barium Fluoride (BaF₂) Wedged Windows feature a 30 arcmin wedge to eliminate etalon effects, improving readout in detection and spectroscopy applications. With a low index of refraction of 1.48, these windows provide high transmission from 200nm to 12µm without the need of an anti-reflection (AR) coating. Barium fluoride windows can be used up to 800°C in a dry environment, but prolonged exposure to moisture can degrade transmission in the vacuum ultraviolet range. ISP Optics Barium Fluoride (BaF₂) Wedged Windows are ideal for infrared spectroscopy, thermal imaging, and general UV-IR detection applications. Barium fluoride is also a fast scintillator and can be used for the detection X-rays, gamma rays, or other high energy particles.

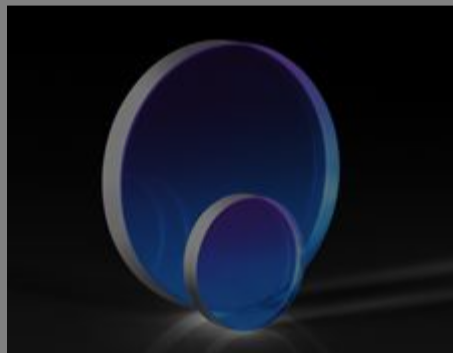
Note: These optical windows are very sensitive to thermal shock.

Technical Information

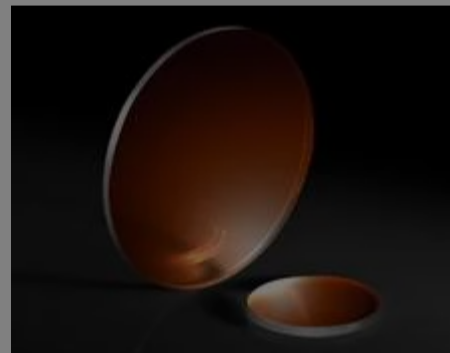
Related Products



Barium Fluoride (BaF₂) Windows



Magnesium Fluoride (MgF₂) Windows



Lithium Fluoride (LiF) Windows

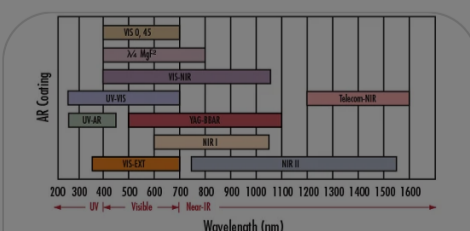


Bar-Type Holders

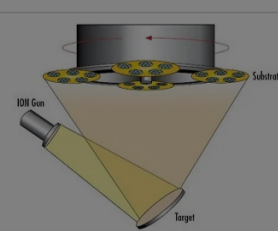
Resources

Media Type

- Application Note
- Scientific Paper
- Video
- Glossary



APPLICATION NOTE
Anti-Reflection (AR) Coatings



APPLICATION NOTE
An Introduction to Optical Coatings

SPIE.

SCIENTIFIC PAPER
Advantages of using engineered chalcogenide...

Technical Tool

FAQ

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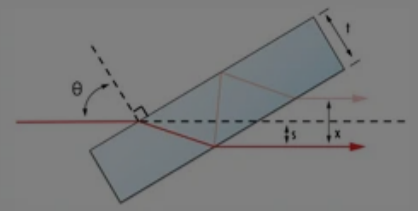
Infrared Light

GLOSSARY

Short Wave
Infrared
(SWIR)

📊 TECHNICAL TOOL

Beam
Displacement
Calculator



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