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50.8mm Dia., 6mm Thick, 30' Wedge, BBAR (2000-5000nm) Coated, ISP Optics Barium Fluoride (BaF₂) Wedged Window

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Barium Fluoride (BaF₂) Wedged Windows



Stock **#23-720** CLEARANCE **5 In Stock**

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+

A\$1,360⁰⁰

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General

Type:

Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):

43.18

50.80 +0.0/-0.13	Diameter (mm):
6.00 ±0.13	Thickness (mm):
Protective as needed	Bevel:
85	Clear Aperture (%):
Fine Ground	Edges:
0.34	Poisson's Ratio:
53	Young's Modulus (GPa):
82.00	Knoop Hardness (kg/mm²):
30±15 arcmin	Wedge Angle (arcmin):

Optical Properties

BBAR (2000-5000nm)	Coating:
Barium Fluoride (BaF ₂)	Substrate: □
1.478 @ 0.5µm 1.451 @ 5µm 1.401 @ 10µm	Index of Refraction (n _d):
60-40	Surface Quality:
81.78	Abbe Number (v _d):
Random	Axis Orientation:
R _{avg} <1.5% @ 2000-5000nm R _{abs} <3.0% @ 2000-5000nm R _{avg} <1.75% @ 2000-4000nm	Coating Specification:
2000 - 5000	Wavelength Range (nm):
2λ@633nm	Surface Flatness (P-V):

Material Properties

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

Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

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

