

[See all 4 Products in Family](#)

# 50.8mm Dia., 6mm Thick, 30' Wedge, BBAR (2000-5000nm) Coated, ISP Optics Barium Fluoride (BaF<sub>2</sub>) Wedged Window

See More by [ISP Optics](#)



Barium Fluoride (BaF<sub>2</sub>) Wedged Windows



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

- 1 + S\$1,087<sup>80</sup>

**ADD TO CART**

Volume Pricing	
Qty 1+	S\$1,087.80 each
Need More?	<a href="#">Request Quote</a>

Product Downloads

**General**

Protective Window **Type:**

Crystal **Type of Window:**

**Physical & Mechanical Properties**

43.18	<b>Clear Aperture CA (mm):</b>
50.80 +0.0/-0.13	<b>Diameter (mm):</b>
6.00 ±0.13	<b>Thickness (mm):</b>
Protective as needed	<b>Bevel:</b>
85	<b>Clear Aperture (%):</b>
Fine Ground	<b>Edges:</b>
0.34	<b>Poisson's Ratio:</b>
53	<b>Young's Modulus (GPa):</b>
82.00	<b>Knoop Hardness (kg/mm<sup>2</sup>):</b>
30±15 arcmin	<b>Wedge Angle (arcmin):</b>

## Optical Properties

BBAR (2000-5000nm)	<b>Coating:</b>
<a href="#">Barium Fluoride (BaF<sub>2</sub>)</a>	<b>Substrate:</b> <input type="checkbox"/>
1.478 @ 0.5µm 1.451 @ 5µm 1.401 @ 10µm	<b>Index of Refraction (n<sub>d</sub>):</b>
60-40	<b>Surface Quality:</b>
81.78	<b>Abbe Number (v<sub>d</sub>):</b>
Random	<b>Axis Orientation:</b>
R <sub>avg</sub> <1.5% @ 2000-5000nm R <sub>abs</sub> <3.0% @ 2000-5000nm R <sub>avg</sub> <1.75% @ 2000-4000nm	<b>Coating Specification:</b>
2000 - 5000	<b>Wavelength Range (nm):</b>
2λ @ 633nm	<b>Surface Flatness (P-V):</b>

## Material Properties

4.89	<b>Density (g/cm<sup>3</sup>):</b>
18.1	<b>Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):</b>

## Regulatory Compliance

<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>
<a href="#">Compliant</a>	<b>Reach 235:</b>

## Product Details

- 30 Arcmin Wedge
- Excellent Transmission from 200nm - 12µm
- Resistant to High-Energy Radiation
- [Precision Flat Barium Fluoride \(BaF<sub>2</sub>\) Windows](#) Also Available

ISP Optics Barium Fluoride (BaF<sub>2</sub>) 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 (BaF<sub>2</sub>) 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

