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# 38.1mm Dia., 4mm Thick, Uncoated, ISP Optics Barium Fluoride (BaF<sub>2</sub>) Window | BF-W-38-4

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Stock #24-500 **CLEARANCE** 3 In Stock

⊖ 1 ⊕ A\$320<sup>00</sup>

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## Product Downloads

### General

BF-W-38-4 **Model Number:**

Protective Window **Type:**

Crystal **Type of Window:**

### Physical & Mechanical Properties

32.38	Clear Aperture CA (mm):
38.10 +0.00/-0.13	Diameter (mm):
4.00 ±0.13	Thickness (mm):
<3	Parallelism (arcmin):
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/mm <sup>2</sup> ):

## Optical Properties

Uncoated	Coating:
<a href="#">Barium Fluoride (BaF<sub>2</sub>)</a>	Substrate: <input type="checkbox"/>
1.48	Index of Refraction (n <sub>d</sub> ):
40-20	Surface Quality:
81.78	Abbe Number (v <sub>d</sub> ):
Random	Axis Orientation:
200 - 12000	Wavelength Range (nm):
2λ	Surface Flatness (P-V):

## Material Properties

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

## Environmental & Durability Factors

Maximum: 800	Operating Temperature (°C):
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## Regulatory Compliance

<a href="#">Compliant</a>	RoHS 2015:
<a href="#">View</a>	Certificate of Conformance:
<a href="#">Compliant</a>	Reach 240:

## Product Details

- Excellent Transmission from 0.2 - 12μm
- Resistant to High-Energy Radiation
- High Transmission without AR Coatings

ISP Optics Barium Fluoride (BaF<sub>2</sub>) Windows provide excellent transmission from 0.2- 12μm without the need for an Anti-Reflection (AR) coating due to its low index of refraction. Barium Fluoride has similar physical properties to Calcium Fluoride, but features higher resistance to high-energy radiation. This makes Barium Fluoride ideal for vacuum UV (VUV) applications such as thermography or laser spectroscopy where high radiation resistance is required. ISP Optics Barium Fluoride (BaF<sub>2</sub>) Windows can be used up to 800°C in a dry environment, but prolonged exposure to moisture can degrade transmission in the ultraviolet range.

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

## 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

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