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# 25.4mm Dia., 4mm Thick, Uncoated, ISP Optics Barium Fluoride (BaF<sub>2</sub>) Window | BF-W-25-4

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Stock **#24-494** CLEARANCE CONTACT US

1 €123.<sup>95</sup>

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## Product Downloads

### General

BF-W-25-4 **Model Number:**

Protective Window **Type:**

**Type of Window:**

## Physical & Mechanical Properties

21.59 **Clear Aperture CA (mm):**

25.40 +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:**

[Barium Fluoride \(BaF<sub>2</sub>\)](#) **Substrate:**

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):**

## Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **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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