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25.4mm Dia., 4mm Thick, Uncoated, ISP Optics Barium Fluoride (BaF_2) Window | BF-W-25-4

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

- 1 + **A$204.80**

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General

Model Number:
BF-W-25-4

Type:
Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):
21.59

Diameter (mm):
25.40 +0.00/-0.13

Thickness (mm):
4.00 ±0.13

Parallelism (arcmin):
<3

Bevel:
Protective as needed

Clear Aperture (%):
85

Edges:
Fine Ground

Poisson's Ratio:
0.34

Young's Modulus (GPa):
53

Knoop Hardness (kg/mm^2):
82.00

Optical Properties

Coating:
Uncoated

Substrate:
Barium Fluoride (BaF_2)

Index of Refraction (n_d):
1.48

Surface Quality:
40-20

Abbe Number (v_d):
81.78

Axis Orientation:
Random

Wavelength Range (nm):
200 - 12000

Surface Flatness (P-V):
2λ

Material Properties

Density (g/cm^3):
4.89

Coefficient of Thermal Expansion CTE (10^{-6}/°C):
18.1

Environmental & Durability Factors

Operating Temperature (°C):
Maximum: 800

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 240:
Compliant

Product Details

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

ISP Optics Barium Fluoride (BaF_2) 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_2) 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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