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25.4mm Dia., 4mm Thick, Uncoated, ISP Optics Barium Fluoride (BaF₂) Window | BF-W-25-4

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

-

1

+

£102⁴⁰

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Volume Pricing	
Qty 1+	£102.40 each
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Product Downloads

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/mm²):
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/cm³):
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 (BaF₂) 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 (BaF₂) 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