

38.1mm Dia., 1mm Thick, Uncoated, ISP Optics Barium Fluoride (BaF₂) Window | BF-W-38-1

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Stock **#24-497** **CLEARANCE** **11 In Stock**

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 1

+

£190⁻⁴⁰

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Volume Pricing	
Qty 1+	£190.40 each
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i Prices shown are exclusive of VAT/local taxes

Product Downloads

General

BF-W-38-1	Model Number:
Protective Window	Type:

Physical & Mechanical Properties

	Clear Aperture CA (mm):
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32.38	
38.10 +0.00/-0.13	Diameter (mm):
1.00 ±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/mm²):

Optical Properties

Uncoated	Coating:
Barium Fluoride (BaF ₂)	Substrate: □
1.48	Index of Refraction (n _d):
40-20	Surface Quality:
81.78	Abbe Number (v _d):
Random	Axis Orientation:
200 - 12000	Wavelength Range (nm):
2λ	Surface Flatness (P-V):

Material Properties

4.89	Density (g/cm³):
18.1	Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):

Environmental & Durability Factors

Maximum: 800	Operating Temperature (°C):
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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 (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

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