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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** **5 In Stock**

- 1 + **€200<sup>.00</sup>**

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| Volume Pricing |                               |
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| Qty 1+         | €200,00 each                  |
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**i** Prices shown are exclusive of VAT/local taxes

Product Downloads

| General                          |                         |
|----------------------------------|-------------------------|
| BF-W-38-4                        | Model Number:           |
| Protective Window                | Type:                   |
| Physical & Mechanical Properties |                         |
|                                  | Clear Aperture CA (mm): |

|                      |                          |
|----------------------|--------------------------|
| 32.38                |                          |
| 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/mm²): |

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/cm³):                                             |
| 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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