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## 25.4mm Dia., 1mm Thick, Uncoated, ISP Optics Sapphire Window | AL-W-25-1

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Stock #24-541 **CLEARANCE** 1 In Stock

− 1 + €167<sup>00</sup>

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Qty 1+	€167,00 each
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### General

AL-W-25-1 **Model Number:**

Protective Window **Type:**

Crystal **Type of Window:**

### Physical & Mechanical Properties

Clear Aperture CA (mm):

21.59	
25.40 +0.00/-0.13	<b>Diameter (mm):</b>
1.00 ±0.13	<b>Thickness (mm):</b>
<3	<b>Parallelism (arcmin):</b>
Protective as needed	<b>Bevel:</b>
85	<b>Clear Aperture (%):</b>
Fine Ground	<b>Edges:</b>
0.27	<b>Poisson's Ratio:</b>
435	<b>Young's Modulus (GPa):</b>
1,900.00	<b>Knoop Hardness (kg/mm<sup>2</sup>):</b>

## Optical Properties

Uncoated	<b>Coating:</b>
Sapphire (Al <sub>2</sub> O <sub>3</sub> )	<b>Substrate:</b> <input type="checkbox"/>
1.77	<b>Index of Refraction (n<sub>d</sub>):</b>
60-40	<b>Surface Quality:</b>
72.24	<b>Abbe Number (v<sub>d</sub>):</b>
0.008 for Visible Light Orthogonal to Optical Axis	<b>Birefringence (n<sub>o</sub>-n<sub>e</sub>):</b>
Random	<b>Axis Orientation:</b>
330 - 5500	<b>Wavelength Range (nm):</b>
2λ per 25.4mm	<b>Surface Flatness (P-V):</b>

## Material Properties

3.97	<b>Density (g/cm<sup>3</sup>):</b>
8.8	<b>Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):</b>

## Regulatory Compliance

<a href="#">View</a>	<b>Certificate of Conformance:</b>
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## Product Details

- High Corrosion Resistance and Thermal Stability
- Higher Durability than Glass Windows
- Transmission from 0.33 – 5.5μm

ISP Optics Sapphire Windows are highly durable and transmissive protective windows that are ideal for harsh environments. Sapphire is chemically inert, insoluble in water, and resistant to common acids and alkalis. Chemically, sapphire is single crystal aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) and is useful in a transmission range from 0.33 – 5.5μm when uncoated. ISP Optics Sapphire Windows feature a Knoop Hardness of 1900 and are resistant to scratches, digs, and fractures that might otherwise weaken fused silica substrates. These windows are often used in applications with high temperatures and pressure such as viewports for vacuum or plasma chambers.