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## M46.0 x 0.75, 1.5mm Thick, Uncoated, Machine Vision Mounted Sapphire Window



Machine Vision Mounted Sapphire Windows

Stock **#23-287** **4 In Stock**

⊖ 1 ⊕ £280<sup>00</sup>

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Volume Pricing	
Qty 1-9	£280.00 each
Qty 10-24	£252.00 each
Qty 25+	£239.20 each
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ⓘ Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Protective Window **Type:**

### Physical & Mechanical Properties

38.88 **Clear Aperture CA (mm):**

**Diameter (mm):**

43.20 +0/-0.20

1.50 ±0.10 **Thickness (mm):**

≤3.5 **Parallelism (arcmin):**

Protective as needed **Bevel:**

≥90 **Clear Aperture (%):**

Fine Ground **Edges:**

0.27 **Poisson's Ratio:**

435 **Young's Modulus (GPa):**

1,900.00 **Knoop Hardness (kg/mm<sup>2</sup>):**

## Optical Properties

Uncoated **Coating:**

Sapphire (Al<sub>2</sub>O<sub>3</sub>) **Substrate:**

1.77 **Index of Refraction (n<sub>d</sub>):**

80-50 **Surface Quality:**

72.24 **Abbe Number (v<sub>d</sub>):**

0.008 for Visible Light Orthogonal to Optical Axis **Birefringence (n<sub>o</sub>-n<sub>e</sub>):**

Random **Axis Orientation:**

330 - 5500 **Wavelength Range (nm):**

2λ (typical) **Surface Flatness (P-V):**

## Threading & Mounting

M46.0 x 0.75 **Filter Thread:**

48.00 **Mount Diameter (mm):**

7.0 **Mount Thickness (mm):**

## Material Properties

3.97 **Density (g/cm<sup>3</sup>):**

8.8 **Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):**

## Regulatory Compliance

[View](#) **Certificate of Conformance:**

## Product Details

- Protective Windows for Machine Vision Applications
- Windows Feature Extreme Surface Hardness and Chemical Resistance
- M25.5 to M62.0 Filter Threads Available

Machine Vision Mounted Sapphire Windows are mounted in durable anodized aluminum housings with common filter threads for easy integration with most imaging lenses. The windows within the mount are manufactured from durable sapphire making them ideal for rugged environments because of their extreme surface hardness, high thermal conductivity, high dielectric constant and resistance to common chemical acids and alkalis. Machine Vision Mounted Sapphire Windows feature both male and female threads, allowing them to be combined with other mounted filters or polarizers. The uncoated windows are useful within a transmission range from 330 – 5500nm making them ideal for machine vision applications in the UV, Visible, and Infrared spectra.