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## 50.8mm Dia., 1mm Thick, Uncoated, $\lambda/10$ IR Fused Silica Window



Stock #70-109 **13 In Stock**

S\$400<sup>40</sup>

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Volume Pricing	
Qty 1-5	S\$400.40 each
Qty 6-25	S\$320.60 each
Qty 26-49	S\$299.60 each
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### Product Downloads

#### General

Protective Window Type:

Glass Type of Window:

#### Physical & Mechanical Properties

45.72 Clear Aperture CA (mm):

50.80 +0.00/-0.20	<b>Diameter (mm):</b>
1.00 ±0.10	<b>Thickness (mm):</b>
Protective as needed	<b>Bevel:</b>
90	<b>Clear Aperture (%):</b>
Fine Ground	<b>Edges:</b>
<5	<b>Parallelism (arcsec):</b>
0.17	<b>Poisson's Ratio:</b>
73	<b>Young's Modulus (GPa):</b>
522.00	<b>Knoop Hardness (kg/mm<sup>2</sup>):</b>

## Optical Properties

Uncoated	<b>Coating:</b>
IR Fused Silica	<b>Substrate:</b> <input type="checkbox"/>
1.458	<b>Index of Refraction (n<sub>d</sub>):</b>
20-10	<b>Surface Quality:</b>
λ/10	<b>Transmitted Wavefront, P-V:</b>
67.8	<b>Abbe Number (v<sub>d</sub>):</b>
200 - 3500	<b>Wavelength Range (nm):</b>

## Material Properties

2.20	<b>Density (g/cm<sup>3</sup>):</b>
0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C)	<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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## Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- IR Grade Fused Silica Substrates
- Broad Transmission Range from 200 – 3500nm
- λ/10 Transmitted Wavefront Distortion
- Excellent Thermal Stability

λ/10 Infrared (IR) Fused Silica Windows feature 20-10 surface quality, <5 arcsec parallelism, and broad transmission from 200 – 3500nm without absorption bands common in other fused silica materials. These fused silica windows offer superior transmission characteristics and a low coefficient of thermal expansion that provides high thermal stability and resistance to thermal shock. λ/10 Infrared (IR) Fused Silica Windows feature laser grade specifications and are available in a variety of diameter and thickness options. These windows are ideal for FLIR, FTIR spectroscopy, medical systems, and thermal imaging applications.