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## 55mm Dia. NIR I Laser Debris Shield



Laser Debris Shields

Stock #37-676 **14 In Stock**

⊖ 1 ⊕ S\$176<sup>00</sup>

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Volume Pricing	
Qty 1-5	S\$176.40 each
Qty 6-25	S\$152.60 each
Qty 26-49	S\$136.50 each
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### Product Downloads

### General

Protective Window **Type:**  
Glass **Type of Window:**

### Physical & Mechanical Properties

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

55.00 ±0.1	<b>Diameter (mm):</b>
1.50 +0.15/-0.00	<b>Thickness (mm):</b>
<45	<b>Parallelism (arcmin):</b>
Break Edges	<b>Bevel:</b>
85	<b>Clear Aperture (%):</b>
Fine Ground	<b>Edges:</b>
0.16	<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

NIR I (600-1050nm)	<b>Coating:</b>
Fused Quartz	<b>Substrate:</b> <input type="checkbox"/>
1.458	<b>Index of Refraction (n<sub>d</sub>):</b>
40-20	<b>Surface Quality:</b>
λ/2 (70% of Dia.)	<b>Transmitted Wavefront, P-V:</b>
67.8	<b>Abbe Number (v<sub>d</sub>):</b>
R <sub>avg</sub> ≤0.5% @ 600 - 1050nm	<b>Coating Specification:</b>
600 - 1050	<b>Wavelength Range (nm):</b>

## Material Properties

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

## Regulatory Compliance

<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>
<a href="#">Compliant</a>	<b>Reach 235:</b>

### 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:

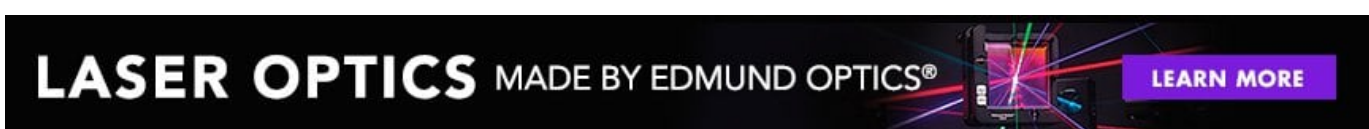
- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

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

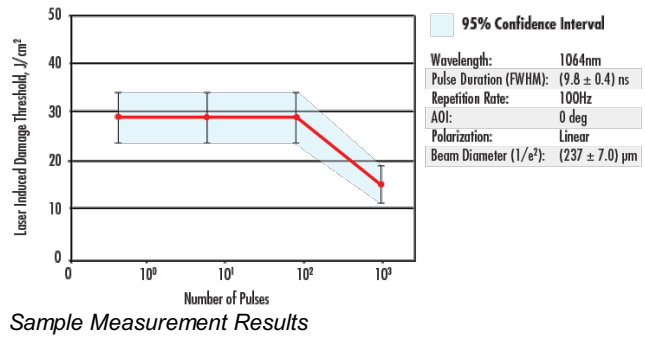
## Product Details

- Protective Shield for Optical Systems
- Sizes from 50mm to 134mm
- Uncoated and Laser Line Coated Options Available

Laser Debris Shields, also referred to as laser cover slides or laser cover glass, are designed for use in laser machining applications and can dramatically improve the longevity of more complex optical assemblies within a system. These shields are constructed of durable fused silica or fused quartz for an optimal combination of transmission and protection from harsh manufacturing environments. Laser Debris Shields are available either uncoated, in a variety of Nd:YAG laser line Anti Reflective coatings that provide reflectivity of less than 0.25% per surface, or with a NIR I Broadband coating with reflectivity of less than 0.5% per surface.



## Technical Information



## Compatible Mounts