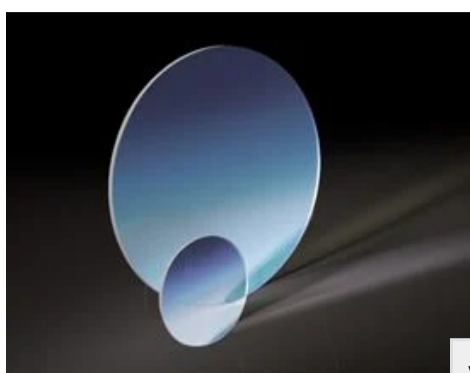


# 50mm Dia. NIR I Laser Debris Shield



Laser Debris Shields

Stock #37-675 **20+ In Stock**

1 C\$169<sup>.40</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	C\$169.40 each
Qty 6-25	C\$144.20 each
Qty 26-49	C\$128.80 each
Need More?	<a href="#">Request Quote</a>

Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
Curve (xlsx)	eDrawing:easm
EO Spec Sheet	<a href="#">Download All</a>

## General

<b>Type:</b> Protective Window	<b>Type of Window:</b> Glass
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## Physical & Mechanical Properties

<b>Clear Aperture CA (mm):</b> 42.50	<b>Diameter (mm):</b> 50.00 ±0.1
<b>Thickness (mm):</b> 2.00 +0.15/-0.00	<b>Parallelism (arcmin):</b> <45
<b>Bevel:</b> Break Edges	<b>Clear Aperture (%):</b> 85
<b>Edges:</b> Fine Ground	<b>Poisson's Ratio:</b> 0.16
<b>Young's Modulus (GPa):</b> 73	<b>Knoop Hardness (kg/mm<sup>2</sup>):</b> 522.00

## Optical Properties

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

## Material Properties

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

RoHS 2015: [Compliant](#)

Certificate of Conformance: [View](#)

Reach 235: [Compliant](#)

## 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:

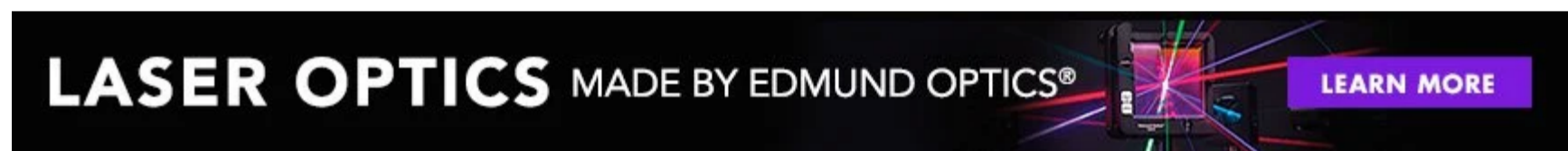
- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

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

*Sample Measurement Results*

## Frequently Purchased Together



#32-806 - 6" x 6" Translucent, IR Material Window  
C\$45.50

Qty 



#32-807 - 6" x 6" White, IR Material Window  
C\$45.50

Qty 



#33-000 - 25mm Dia. Broadband IR Laser Mirror  
C\$441.00

















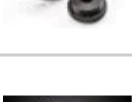

















Qty 





#47-708 - 18mm Dia. x 50mm FL, VIS 0° Coated, Achromatic Lens  
C\$154.00

Qty 

## Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
<a href="#">MORE+</a> 	50.0mm Optic Dia., Optic Mount	Fixed		#64-567	C\$68.95 Request Quote	2 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0mm Optic Dia., Optic Mount	Fixed		#64-568	C\$68.95 Request Quote	7 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	C\$116.20 Request Quote	20+ In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-867	C\$134.40 Request Quote	CONTACT US <input type="text" value="1"/> 
<a href="#">MORE+</a> 	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	C\$151.20 Request Quote	CONTACT US <input type="text" value="1"/> 
<a href="#">MORE+</a> 	19.5 - 108.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-670	C\$159.60 Request Quote	20+ In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	C\$162.40 Request Quote	20+ In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	C\$168.00 Request Quote	20+ In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., Optical Cell Assembly	Fixed		#36-465 CLEARANCE	C\$179.93 Request Quote	2 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#58-852	C\$189.00 Request Quote	20+ In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-855	C\$219.80 Request Quote	20+ In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#26-816	C\$344.40 Request Quote	12 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#26-819	C\$375.20 Request Quote	CONTACT US <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-957	C\$431.20 Request Quote	1 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	C\$574.00 Request Quote	CONTACT US <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#55-000	C\$714.00 Request Quote	7 In Stock <input type="text" value="1"/> 
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-960	C\$847.00 Request Quote	20+ In Stock <input type="text" value="1"/> 

	Title	Type	Compare	Stock Number	Price	Buy
<a href="#">MORE+</a> 	50.0/50.8mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-778	C\$1,176.00 <a href="#">Request Quote</a>	10 In Stock <input type="text" value="1"/> 

Check out our full selection of mounts [here](#).

# Resources

## Media Type

- Application Note
- Technical Tool
- Published Article
- Glossary
- Video
- FAQ
- Scientific Paper

**APPLICATION NOTE**

**Anti-Reflection (AR) Coatings**

**APPLICATION NOTE**

**An Introduction to Optical Coatings**

**TECHNICAL TOOL**

**Gaussian Beams Calculator**

**APPLICATION NOTE**

**Understanding Surface Roughness**

**APPLICATION NOTE**

**Common Laser Optics Materials**

**APPLICATION NOTE**

**Importance of Beam Diameter on Laser Damage**

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