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## 50mm Dia., 3mm Thick, 400-1100nm HDAR Coated Fused Silica Window



Stock #29-981 **5 In Stock**

- 1 + MRP ₹36,320

● Price inclusive of all taxes

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Volume Pricing	
Qty 1-5	₹36,320 each
Qty 6-25	₹29,056 each
Qty 26-49	₹27,240 each
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### General

Protective Window **Type:**

Glass **Type of Window:**

### Physical & Mechanical Properties

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

50.00 +0.00/-0.20	<b>Diameter (mm):</b>
3.00 ±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>
0.16	<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

Hardened MS-NIR (400-1100nm)	<b>Coating:</b>
<a href="#">Fused Silica</a>	<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>
R <sub>avg</sub> <1.5% @ 400 - 1100nm R <sub>abs</sub> <2.0% @ 400 - 1100nm	<b>Coating Specification:</b>
400 - 1100	<b>Wavelength Range (nm):</b>
-80 to +160 per MIL-M-13508C Paragraph 4.4.4	<b>Coating Temperature (°F):</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>
7980 0G	<b>Fused Silica Grade:</b>

## Environmental & Durability Factors

Severe, per MIL-C-675C Paragraph 4.5.10	<b>Coating Abrasion:</b>
Per MIL-M-13508C Paragraph 4.4.6	<b>Coating Adhesion:</b>
≥24 Hours per MIL-C-675C paragraph 4.5.8	<b>Coating Humidity:</b>
≥24 Hours per MIL-C-675C paragraph 4.5.9	<b>Coating Salt Spray:</b>
≥24 Hours Immersion per MIL-C-675C paragraph 4.5.7	<b>Coating Salt Solubility:</b>

## Regulatory Compliance

<a href="#">View</a>	<b>Certificate of Conformance:</b>
United States	<b>Country of Origin:</b>
Edmund Optics India Private Limited 267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038 Phone: +91- 80-6845 0000	<b>Imported By:</b>

## Product Details

- HDAR Coating Achieves Severe Abrasion Requirements of ML-C-675C
- Low Reflectivity Across the VIS-NIR
- Ideal for Use in Harsh Environments
- [Uncoated Fused Silica Windows](#) Also Available

High Durability Anti-Reflection (HDAR) Coated Fused Silica Windows feature precision fused silica substrates with rugged HDAR coatings where frequent handling or cleaning are required. Similar to [diamond-like carbon \(DLC\) coatings](#), the HDAR coatings are designed to withstand temperature cycling from -80 to +160°F, high humidity for 24 hours, salt spray for a continuous period of 24 hours, and salt solubility for an immersion period of 24 hours. These coatings are deposited on fused silica which has excellent mechanical and thermal stability, ensuring high performance even in harsh environments. High Durability Anti-Reflection (AR) Coated Fused Silica Windows are ideal for aerospace, defense, and industrial applications, as well as any optical application requiring durable protective windows.

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