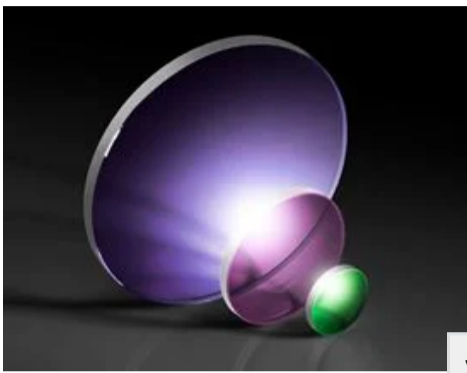


50mm Dia., 3mm Thick, 400-1100nm HDAR Coated Fused Silica Window



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

1

C\$504^{.00}

ADD TO CART

Volume Pricing	
Qty 1-5	C\$504.00 each
Qty 6-25	C\$403.20 each
Qty 26-49	C\$378.00 each
Need More?	Request Quote

Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	Download All

General

Type: Protective Window	Type of Window: Glass
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Physical & Mechanical Properties

Clear Aperture CA (mm): 45.00	Diameter (mm): 50.00 +0.00/-0.20
Thickness (mm): 3.00 ±0.10	Bevel: Protective as needed
Clear Aperture (%): 90	Edges: Fine Ground
Parallelism (arcsec): <5	Poisson's Ratio: 0.16
Young's Modulus (GPa): 73	Knoop Hardness (kg/mm²): 522.00

Optical Properties

Coating: Hardened VIS-NIR (400-1100nm)	Substrate: Fused Silica
Index of Refraction (n_d): 1.458	Surface Quality: 20-10
Transmitted Wavefront, P-V: λ/10	Abbe Number (v_d): 67.8
Coating Specification: R _{avg} <1.5% @ 400 - 1100nm R _{abs} <2.0% @ 400 - 1100nm	Wavelength Range (nm): 400 - 1100
Coating Temperature: -80 to +160 per MIL-M-13508C	

Material Properties

Density (g/cm³):	2.20	Coefficient of Thermal Expansion CTE (10⁻⁶/°C):	0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C)
Fused Silica Grade:	7980 0G		

Environmental & Durability Factors

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

Regulatory Compliance

Certificate of Conformance: [View](#)

Product Details

- HDAR Coating Achieves Severe Abrasion Requirements of MIL-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.

Related Products



High Durability Anti-Reflection (AR) Coated Sapphire Windows

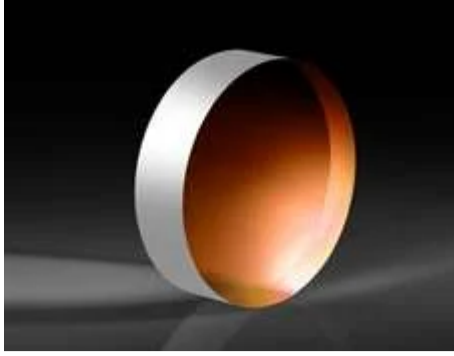


λ/10 UV Fused Silica Windows



PUROSOL™ Optical Cleaner

Frequently Purchased Together



#47-840 - 50mm Dia., 5mm Thick, VIS 0° Coated $\lambda/10$ Fused Silica Window
C\$443.80

#63-066 - M58 10mm Length Extension Tube for Unifoc-76
C\$240.80

#37-021 - 50mm Dia., 6mm Thick, VIS 0° Coated $\lambda/4$ N-BK7 Window
C\$210.00

#13-306 - 50mm Dia., 6mm Thick, VIS-EXT Coated, $\lambda/4$ N-BK7 Window
C\$214.20