

TECHSPEC[®] 50.8mm Dia., 370 - 550nm BBAR Coated, Ultrafast Thin Window



Stock #11-748 20+ In Stock

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1

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A\$477^{.92}

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Volume Pricing	
Qty 1-5	A\$477.92 each
Qty 6-25	A\$430.13 each
Qty 26-49	A\$405.41 each
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SPECIFICATIONS

General

Type:
Ultrafast Window

Physical & Mechanical Properties

Protective as needed	Bevel:
90	Clear Aperture (%):
50.80 +0.00/-0.10	Diameter (mm):
1.00 ±0.10	Thickness (mm):
Fine Ground	Edges:
522.00	Knoop Hardness (kg/mm²):
≤30	Parallelism (arcsec):
0.16	Poisson's Ratio:
73	Young's Modulus (GPa):

Optical Properties

67.8	Abbe Number (v _d):
BBAR (370-550nm)	Coating:
R _{abs} <0.55% @ 370 - 550nm	Coating Specification:
1.458	Index of Refraction (n _d):
Fused Silica (Corning 7980)	Substrate:
20-10	Surface Quality:
λ/6	Transmitted Wavefront, P-V:
370 - 550	Wavelength Range (nm):
7.5 J/cm² @ 355nm, 20ns, 20Hz	Damage Threshold, By Design: ☐

Material Properties

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

Regulatory Compliance

View	Certificate of Conformance:
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PRODUCT DETAILS

- 1mm Thickness for Limited GDD
- Low Loss Broadband IBS Anti-Reflection Coating
- Designs for Wavelengths from 370nm to 2200nm
- Coating GDD of ±30fs²
- UV or IR Grade Fused Silica Substrates

TECHSPEC® Ultrafast Thin Windows are designed with a 1mm thickness to have limited group delay dispersion (GDD), making them ideal for ultrafast laser applications. These thin windows are available coated on both surfaces with an ion-beam sputtered (IBS) broadband antireflection coating optimized to provide low reflectance at wavelength ranges between 370nm to 2.2µm. The IBS coating process also provides these windows with lower absorption losses and scatter than conventionally coated anti-reflection windows. TECHSPEC Ultrafast Thin Windows can also be used in general optical applications that require high-performance optical windows with a small form factor. Uncoated Thin Window substrates (UV Fused Silica or IR Grade Fused Silica) are available to offer the flexibility of custom coatings to meet your application requirements, please contact us for more information.

IR grade fused silica differs from UV grade fused silica by its reduced amount of OH- ions, resulting in higher transmission throughout the NIR spectrum and reduction of transmission in the UV spectrum.

TECHNICAL INFORMATION



CUSTOM

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](#).

COMPATIBLE MOUNTS