

TECHSPEC[®] 5mm Dia. Ultra-Thin NIR II Coated, Fused Silica Window



Stock #75-466 NEW 5 In Stock

-

1

+

A\$302^{.40}

ADD TO CART

Volume Pricing	
Qty 1-5	A\$302.40 each
Qty 6+	A\$241.60 each
Need More?	Request Quote

Product Downloads

General

Type:
Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):
4.25

Diameter (mm):
5.00 +0.00/-0.10

Thickness (mm):
0.20 ±0.025

	Bevel:
Protective as needed	
	Edges:
Fine Ground	
	Parallelism (arcsec):
<1	
	Poisson's Ratio:
0.16	
	Young's Modulus (GPa):
73	

	Knoop Hardness (kg/mm²):
522.00	

Optical Properties

	Coating:
NIR II (750-1550nm)	
	Substrate: ☐
Fused Silica (Corning 7980)	

	Index of Refraction (n _d):
1.458	
	Surface Quality:
60-40	

	Transmitted Wavefront, P-V:
λ/2	
	Abbe Number (v _d):
64.17	

	Coating Specification:
R _{abs} ≤1.5% @ 750 - 800nm R _{abs} ≤1.0% @ 800 - 1550nm R _{avg} ≤0.7% @ 750 - 1550nm	
	Wavelength Range (nm):
750 - 1550	

	Damage Threshold, Reference: ☐
8 J/cm² @ 1064nm, 10ns	

Material Properties

	Density (g/cm³):
2.2	
	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)	

Regulatory Compliance

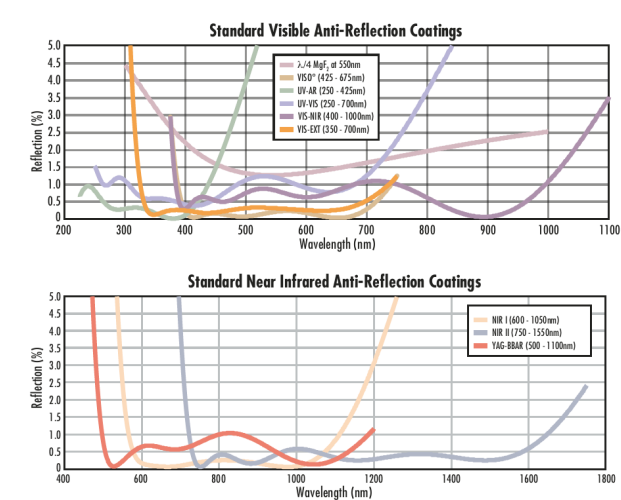
	Certificate of Conformance:
View	

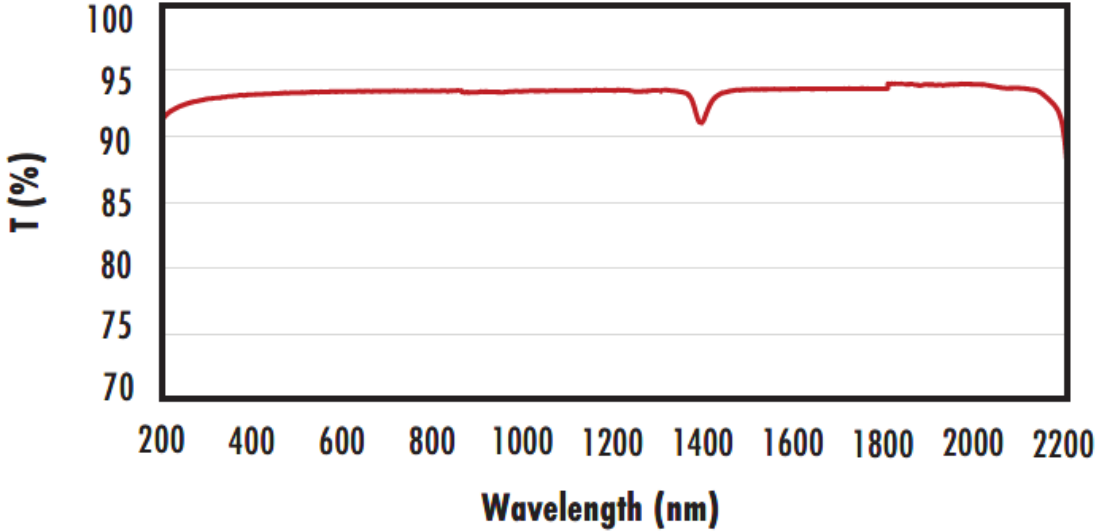
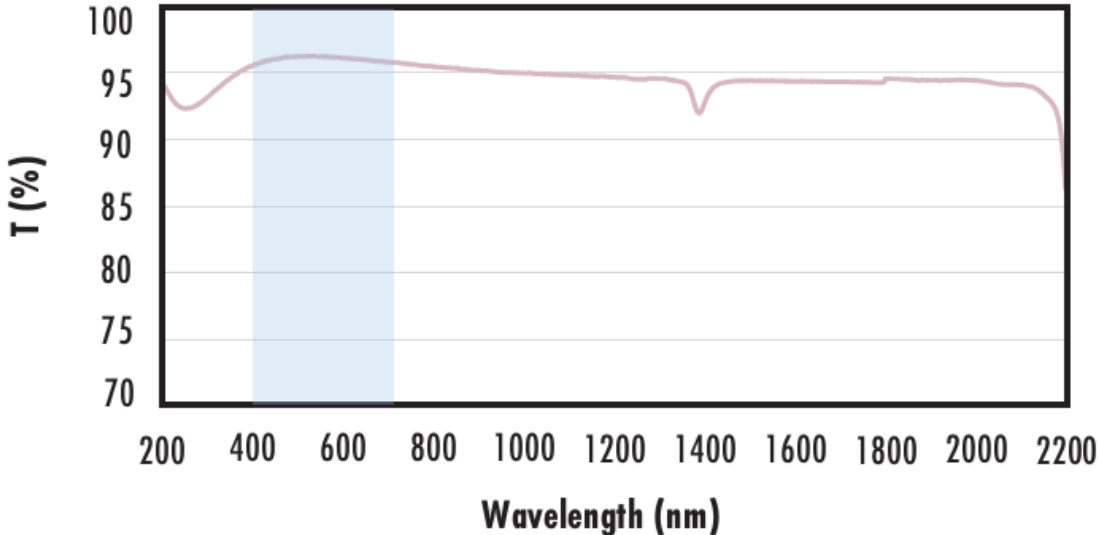
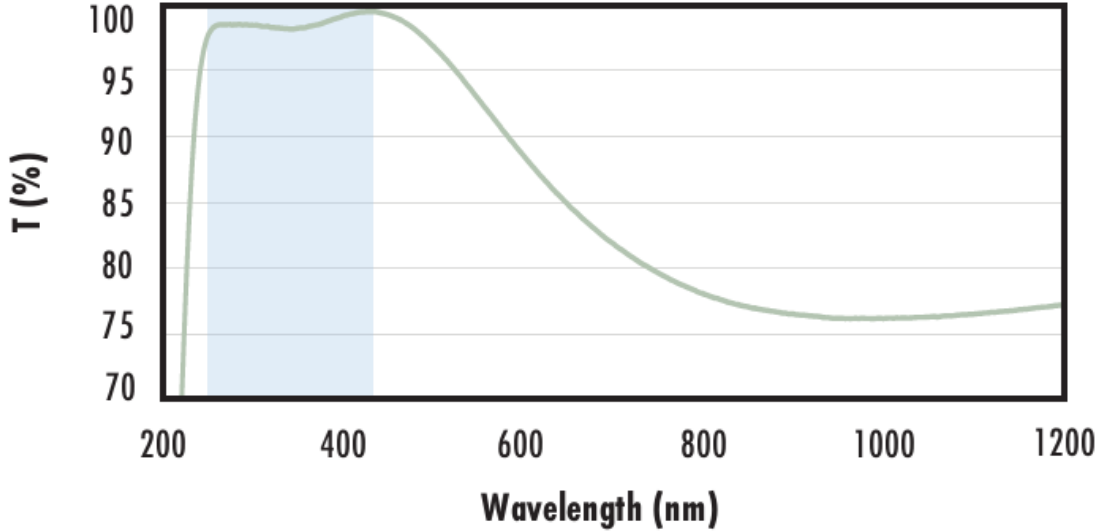
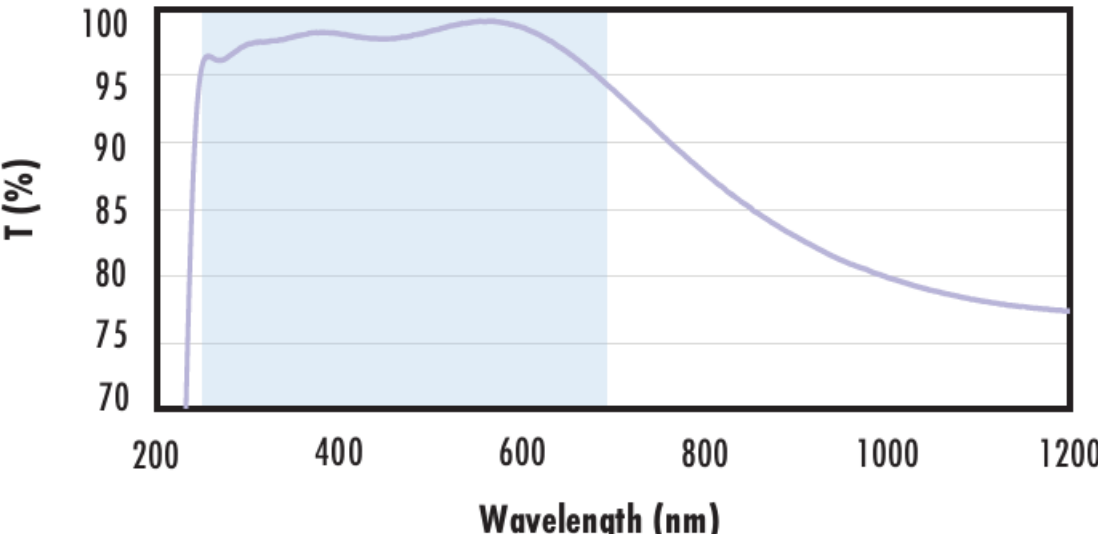
Product Details

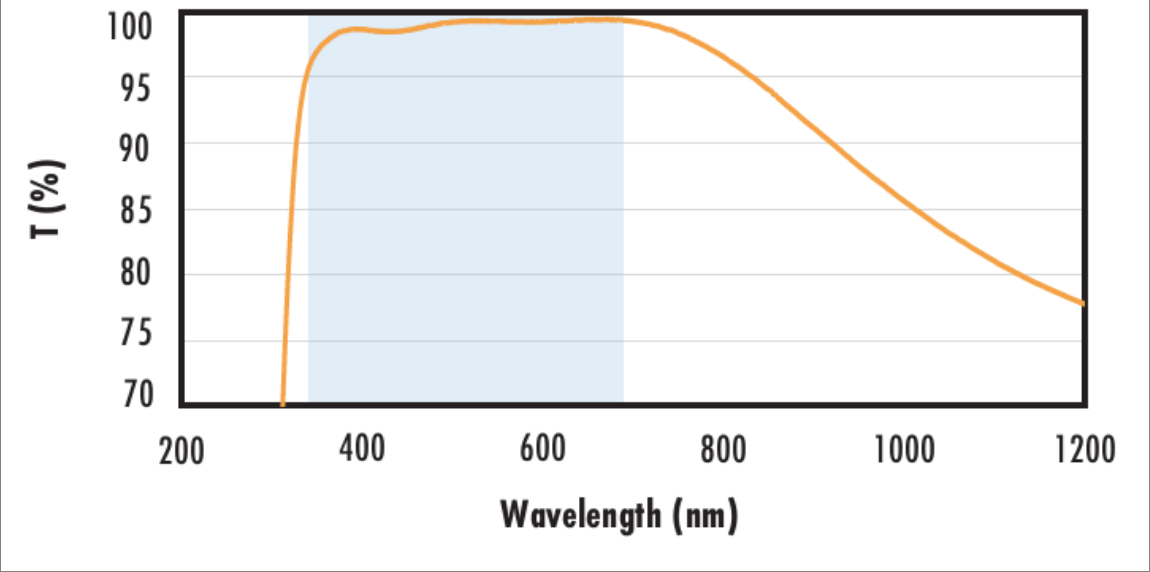
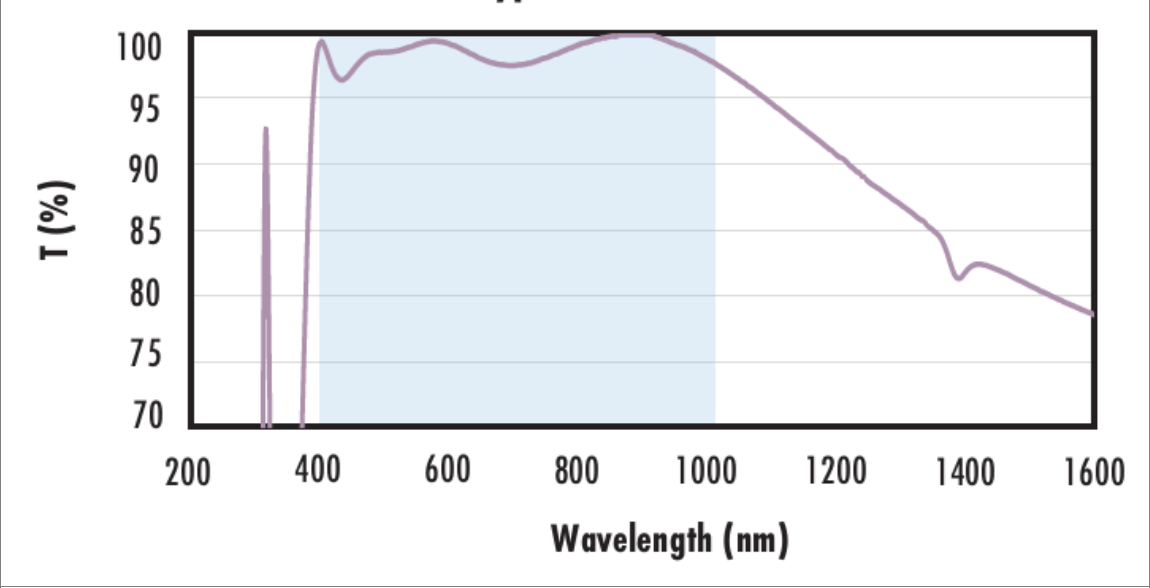
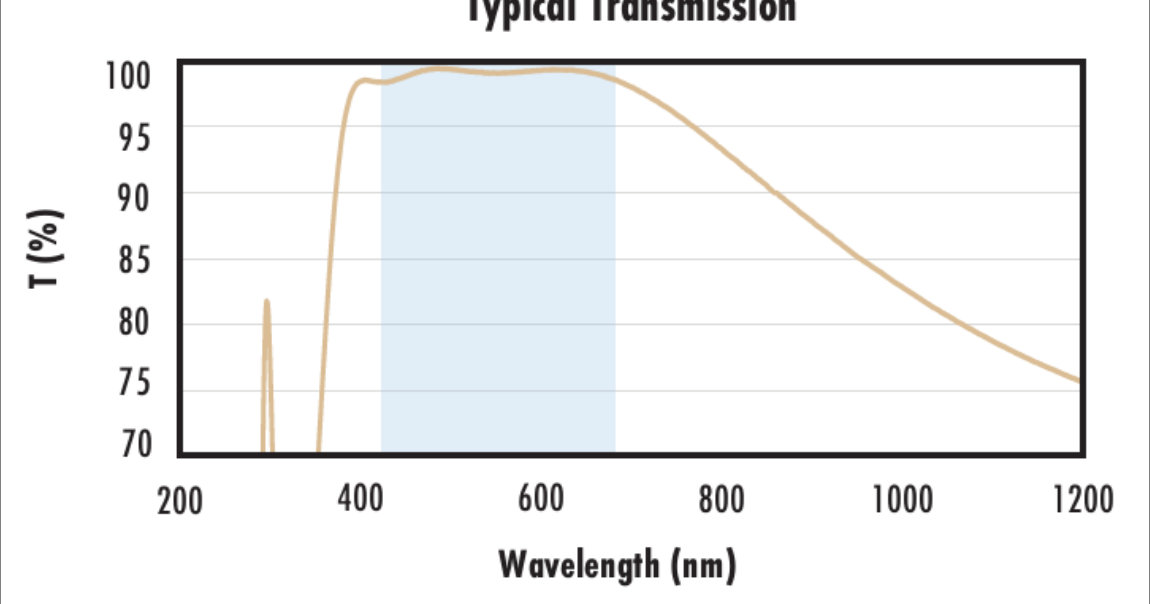
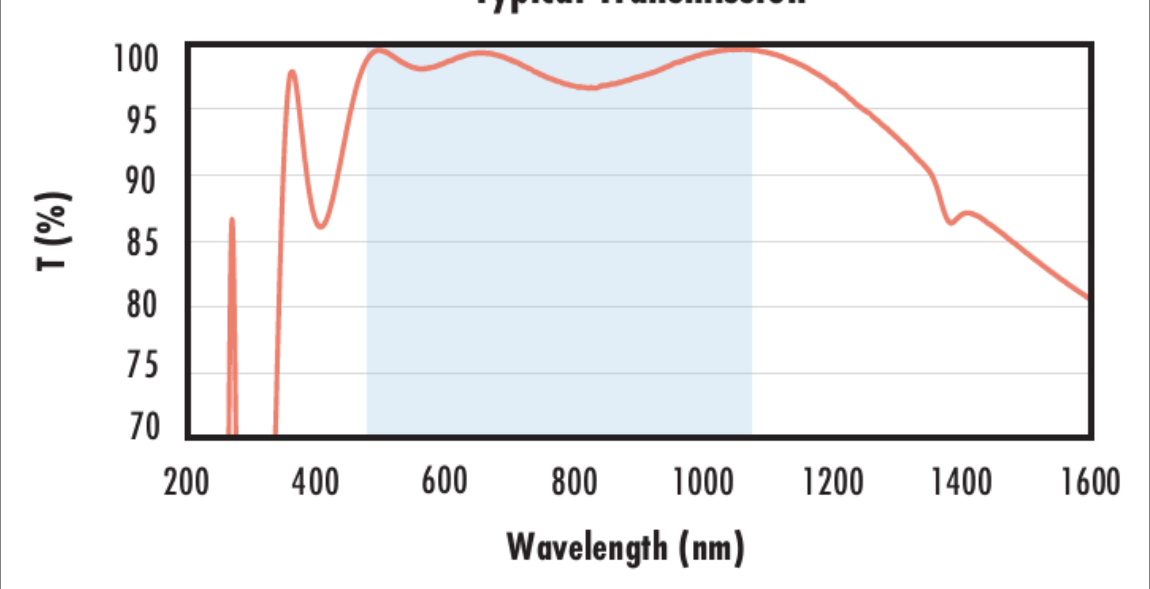
- Ultra-Thin 0.20mm Thickness
- UV Fused Silica Substrates
- Extremely Lightweight

TECHSPEC® Ultra-Thin Fused Silica Windows provide the benefits of fused silica including low thermal expansion, excellent chemical resistance, and UV transmission with a thickness less than 1/5th of our standard fused silica windows. Unlike traditional cover glass, these windows have polished surfaces to provide consistent transmitted wavefront distortion, making them advantageous for OEM applications. Their extremely thin designs make them ideal for both weight and size sensitive applications, especially those requiring broadband transmission from the UV to the NIR. TECHSPEC Ultra-Thin Fused Silica Windows are ideal for handheld medical devices, wearable technology, and portable UV lights.

Technical Information



FUSED SILICA	
Uncoated Fused Silica Typical Transmission 	Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra. Click Here to Download Data
Fused Silica with MgF₂ Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with MgF₂ (400-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with UV-AR Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 1.0\% \text{ @ } 250 - 425\text{nm}$ $R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$ $R_{avg} \leq 0.5\% \text{ @ } 370 - 420\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with UV-VIS Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$ $R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

Fused Silica with VIS-EXT Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with VIS-NIR Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$ $R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with VIS 0° Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with YAG-BBAR Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}$ $R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$ $R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with NIR I Coating Typical Transmission 	

