

TECHSPEC[®] 20mm Dia. Ultra-Thin NIR II Coated, Fused Silica Window



Stock #75-471 NEW 9 In Stock

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1

+

£169^{.60}

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Volume Pricing	
Qty 1-5	£169.60 each
Qty 6+	£135.20 each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):17.00

Diameter (mm):20.00 +0.00/-0.10

0.20 ±0.025	Thickness (mm):
Protective as needed	Bevel:
Fine Ground	Edges:
<1	Parallelism (arcsec):
0.16	Poisson's Ratio:
73	Young's Modulus (GPa):
522.00	Knoop Hardness (kg/mm²):

Optical Properties	
NIR II (750-1550nm)	Coating:
Fused Silica (Corning 7980)	Substrate: ☐
1.458	Index of Refraction (n _d):
60-40	Surface Quality:
λ/2	Transmitted Wavefront, P-V:
64.17	Abbe Number (v _d):
Coating Specification: R _{abs} ≤1.5% @ 750 - 800nm R _{abs} ≤1.0% @ 800 - 1550nm R _{avg} ≤0.7% @ 750 - 1550nm	
750 - 1550	Wavelength Range (nm):
Damage Threshold, Reference: 8 J/cm² @ 1064nm, 10ns	

Material Properties	
2.2	Density (g/cm³):
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)	

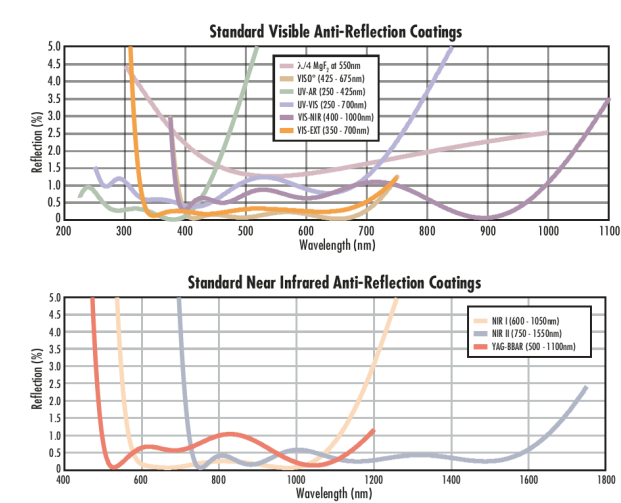
Regulatory Compliance	
View	Certificate of Conformance:

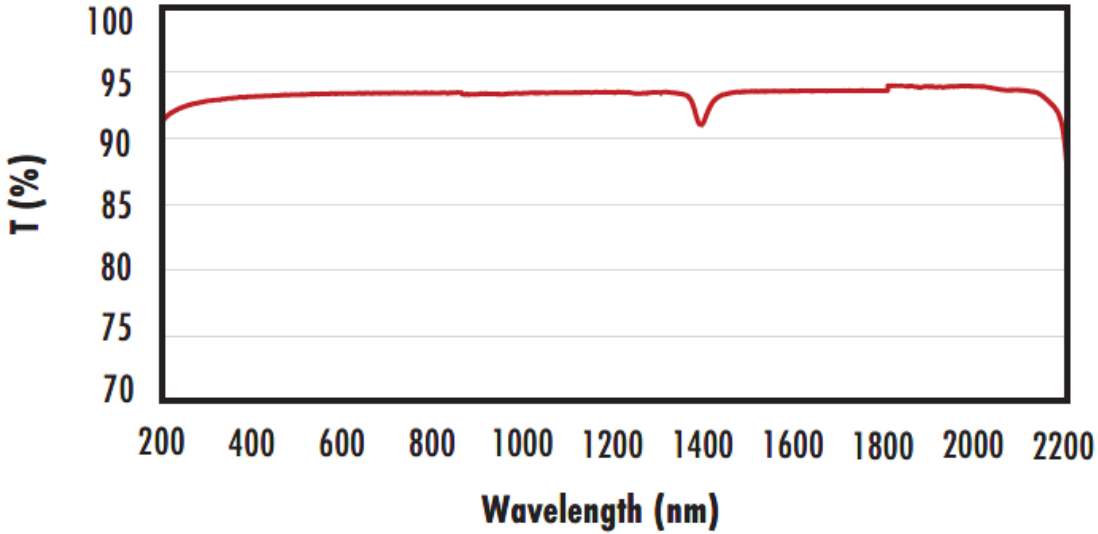
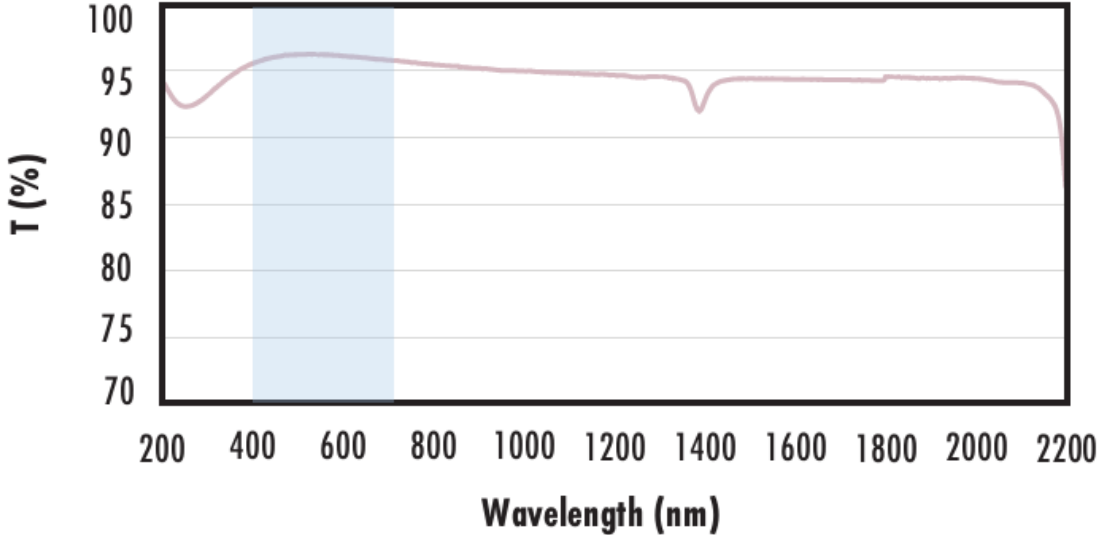
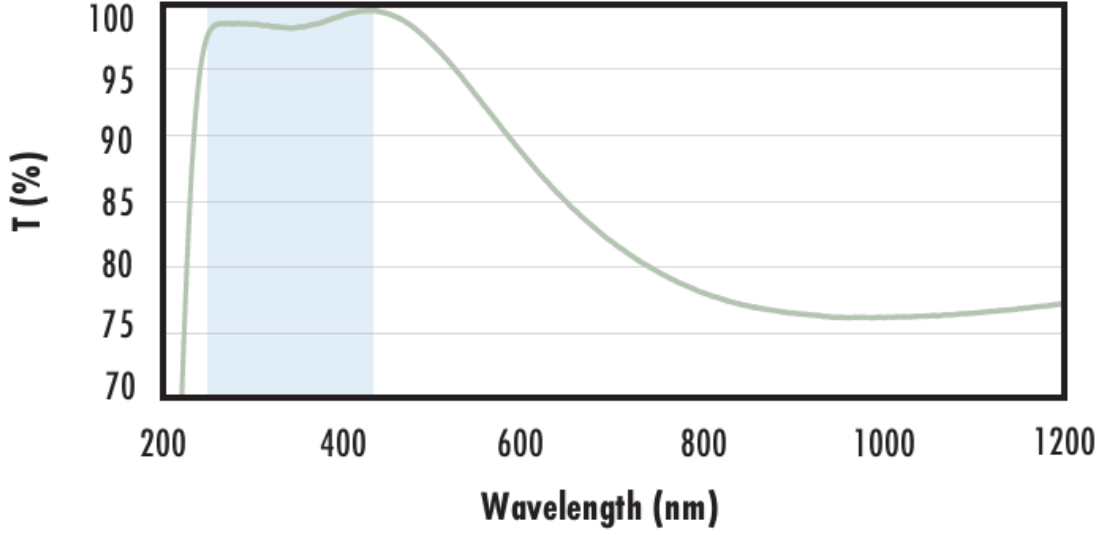
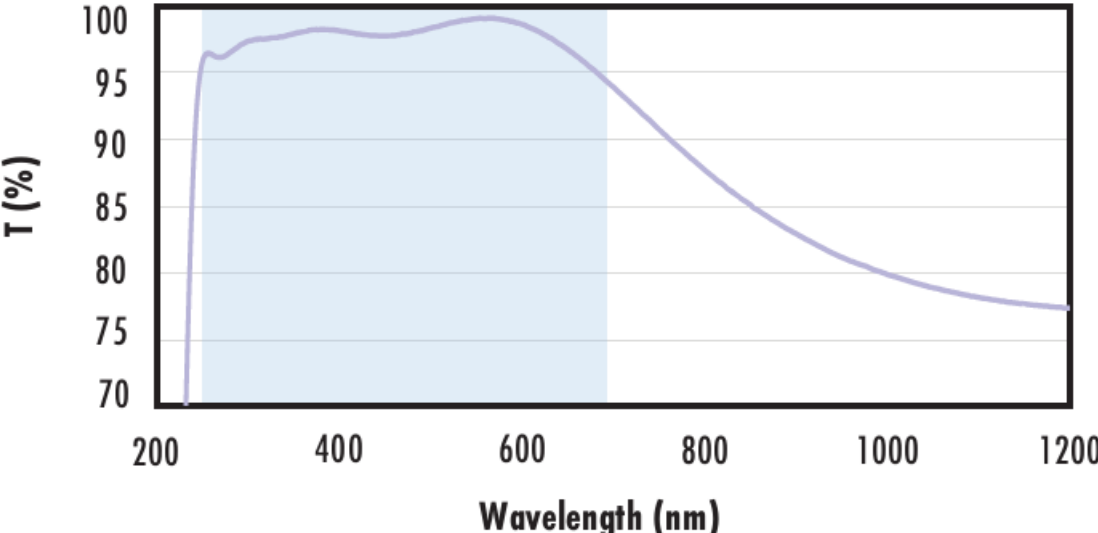
Product Details

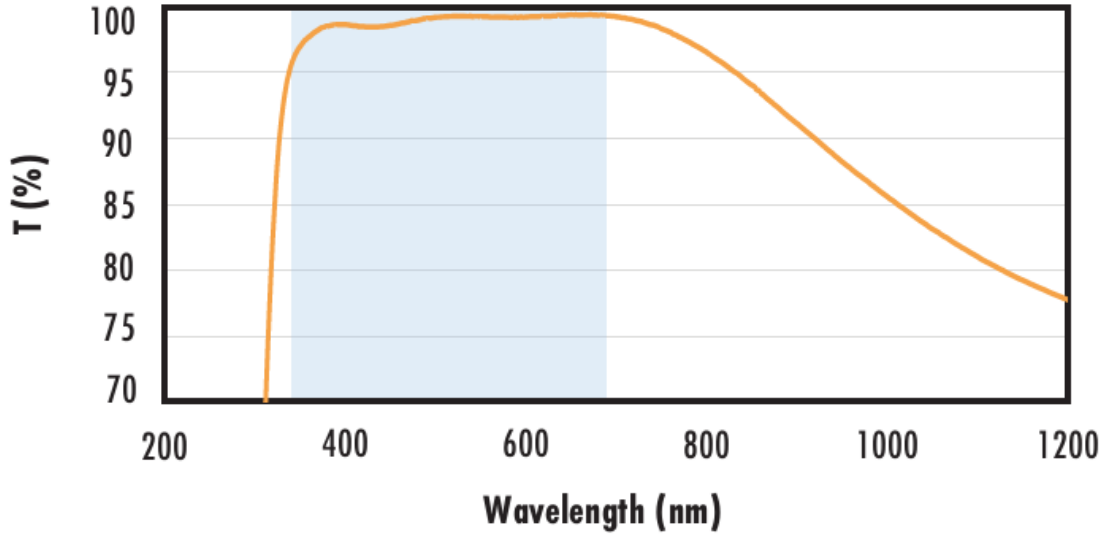
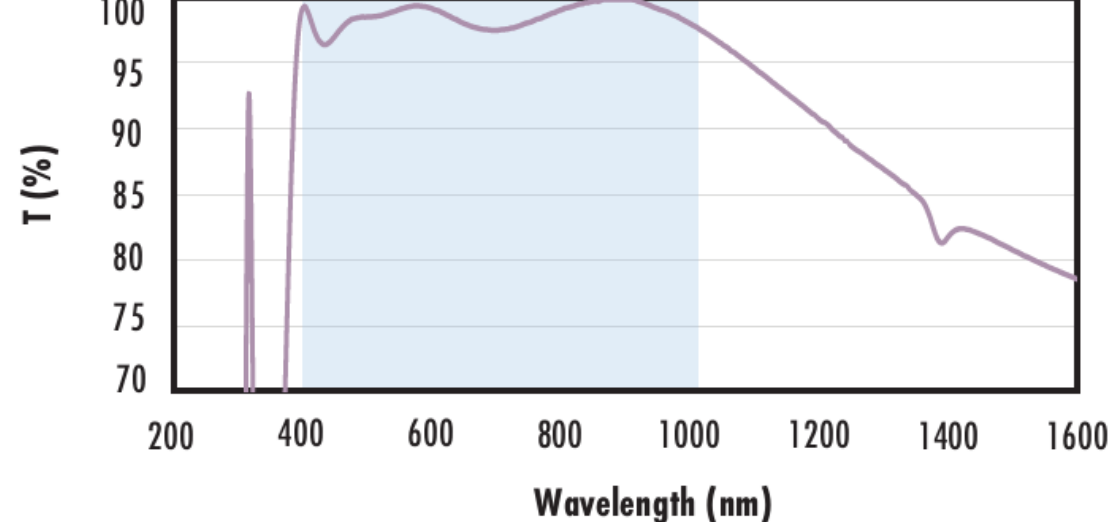
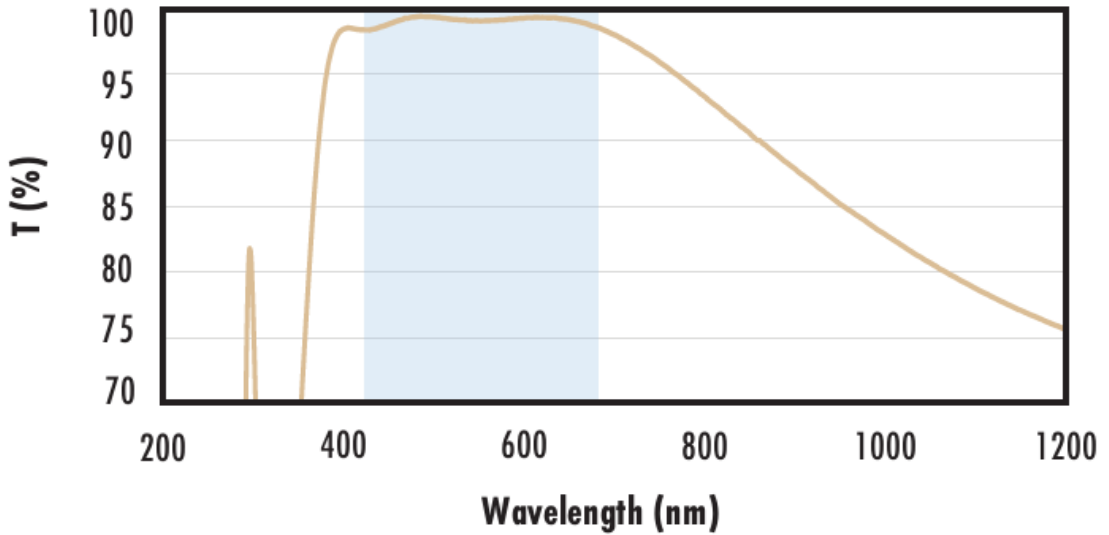
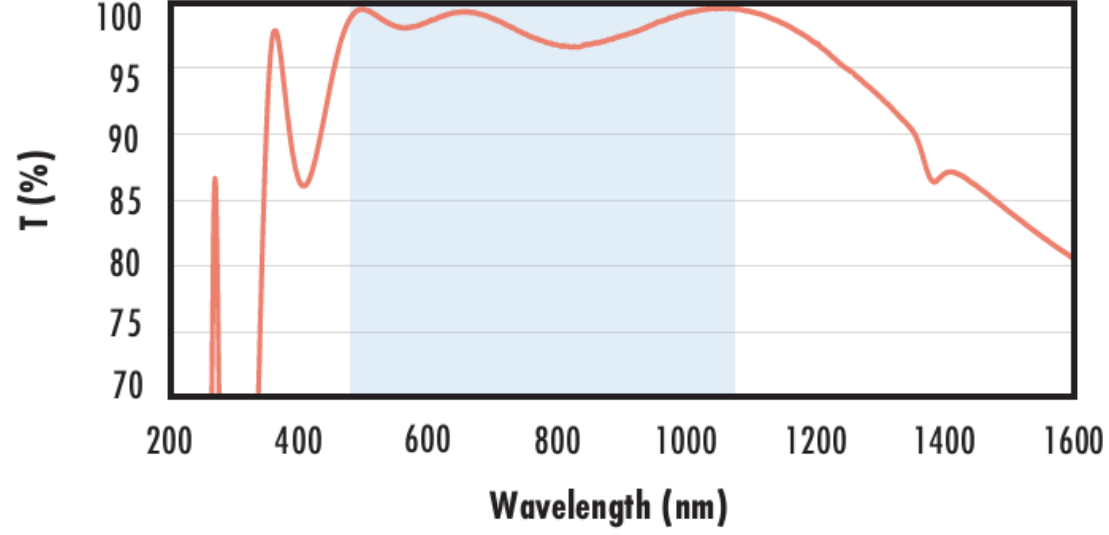
- Ultra-Thin 0.20mm Thickness
- UV Fused Silica Substrates
- Extremely Lightweight

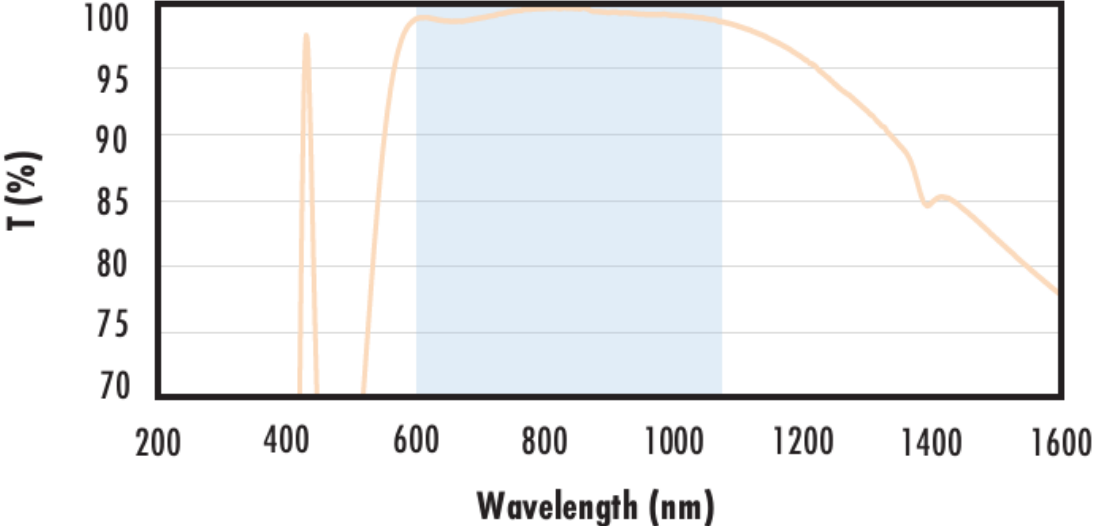
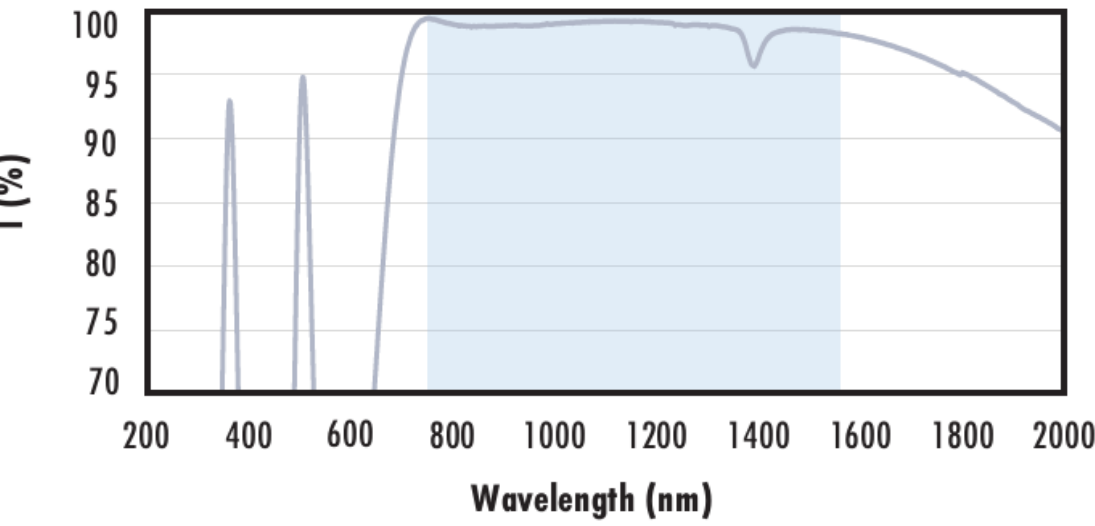
TECHSPEC® Ultra-Thin Fused Silica Windows provide the benefits of fused silica including low thermal expansion, excellent chemical resistance, and UV transmission with a thickness less than 1/5th of our standard fused silica windows. Unlike traditional cover glass, these windows have polished surfaces 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: $R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$ 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: $R_{abs} \leq 0.25\% @ 880\text{nm}$ $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$ 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: $R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$ 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: $R_{abs} \leq 0.25\% @ 532\text{nm}$ $R_{abs} \leq 0.25\% @ 1064\text{nm}$ $R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$ 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	

Typical Transmission 	Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.5\% @ 600 - 1050nm$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with NIR II Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 1.5\% @ 750 - 800nm$ $R_{abs} \leq 1.0\% @ 800 - 1550nm$ $R_{avg} \leq 0.7\% @ 750 - 1550nm$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data