

TECHSPEC® 12.5mm Dia., Uncoated, 30' Wedge, Fused Silica Wedged Window



TECHSPEC® Fused Silica Wedged Windows

Stock **#34-241** 20+ In Stock

-

1

+

S\$186²⁰

ADD TO CART

Volume Pricing	
Qty 1-5	S\$186.20 each
Qty 6-25	S\$148.40 each
Qty 26-49	S\$140.00 each
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General

Type:

Wedged Window

Physical & Mechanical Properties

Clear Aperture CA (mm):

11.25

Diameter (mm):

12.50 +0.0/-0.10

3.00 ±0.20	Thickness (mm):
+0.0/-0.10	Dimensional Tolerance (mm):
Protective as needed	Bevel:
90.00	Clear Aperture (%):
Fine Ground	Edges:
0.16	Poisson's Ratio:
73	Young's Modulus (GPa):
522.00	Knoop Hardness (kg/mm²):
30' ±10'	Wedge Angle (arcmin):

Optical Properties	
Uncoated	Coating:
Fused Silica (Corning 7980)	Substrate: ☐
1.458	Index of Refraction (n _d):
20-10	Surface Quality:
λ/10	Surface Accuracy:
67.8	Abbe Number (v _d):
200 - 2200	Wavelength Range (nm):
λ/10	Surface Flatness (P-V):

Material Properties	
2.20	Density (g/cm³):
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):

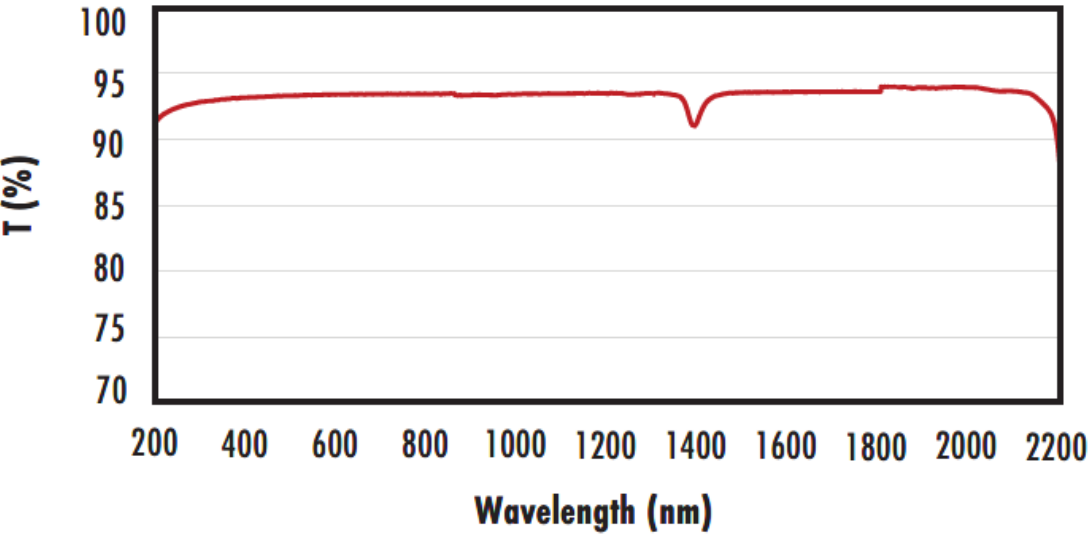
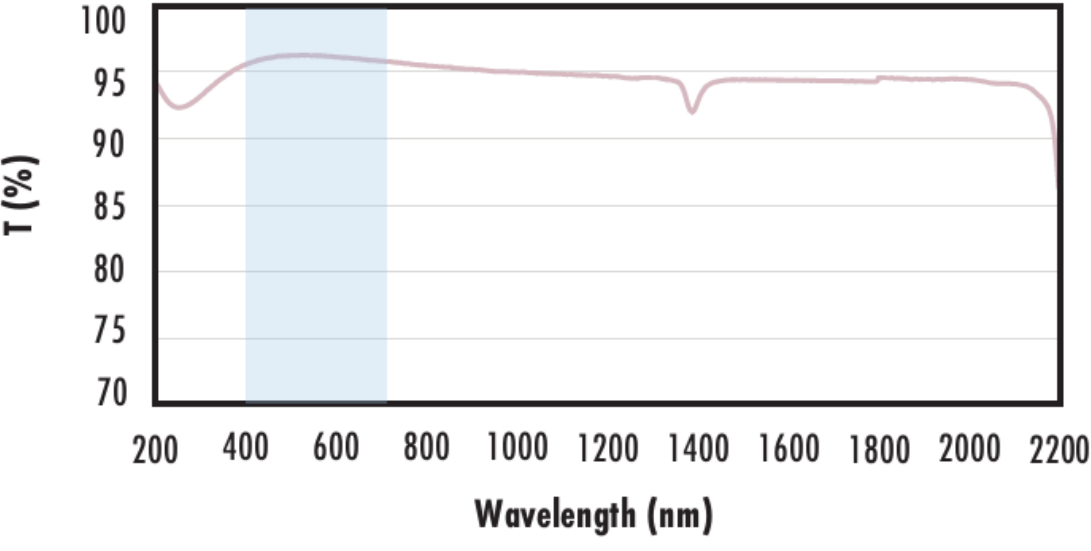
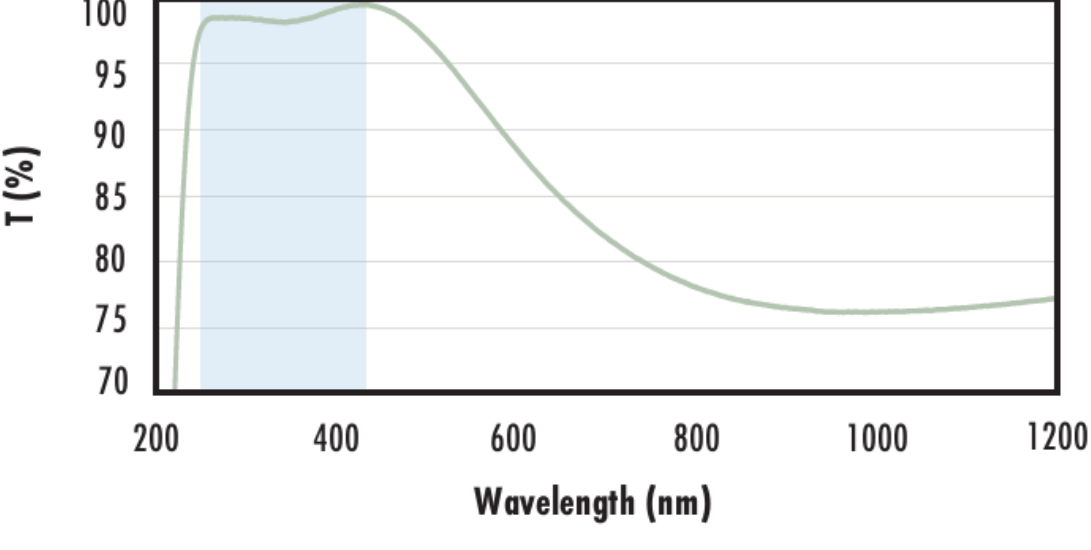
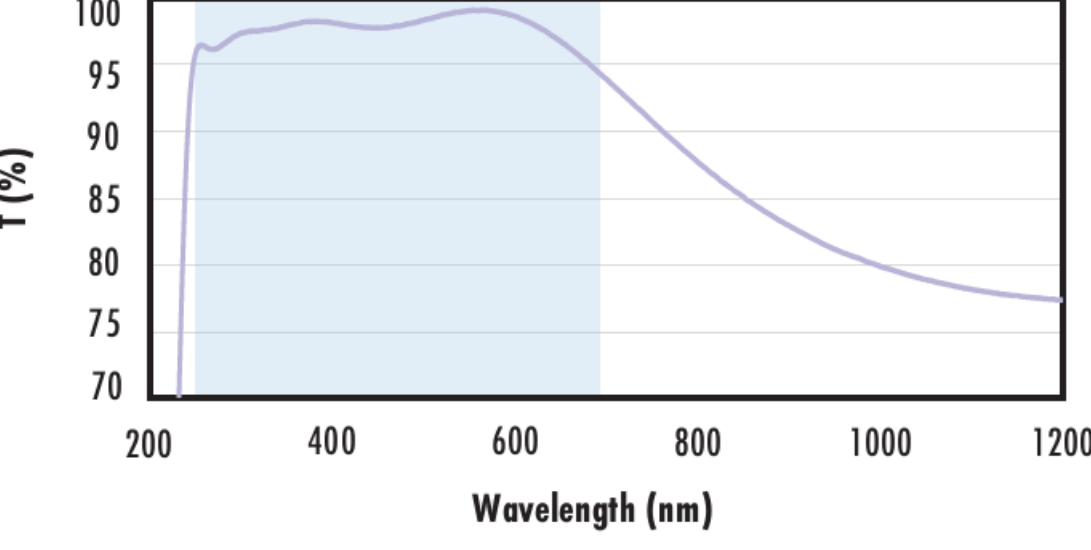
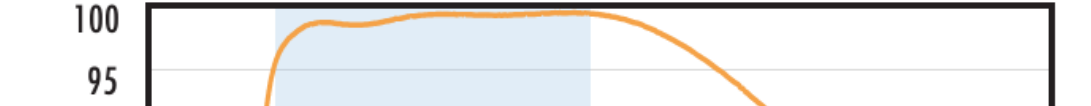
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	REACH 241:

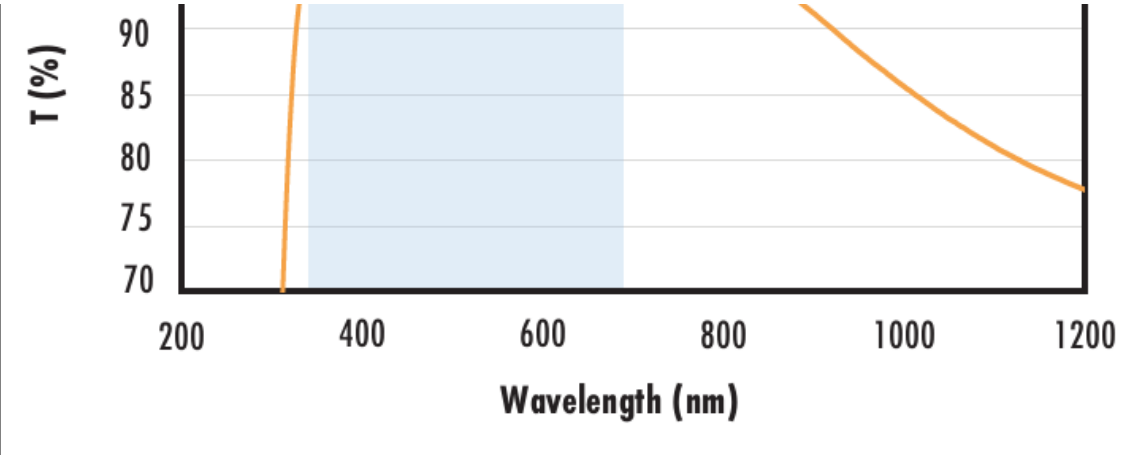
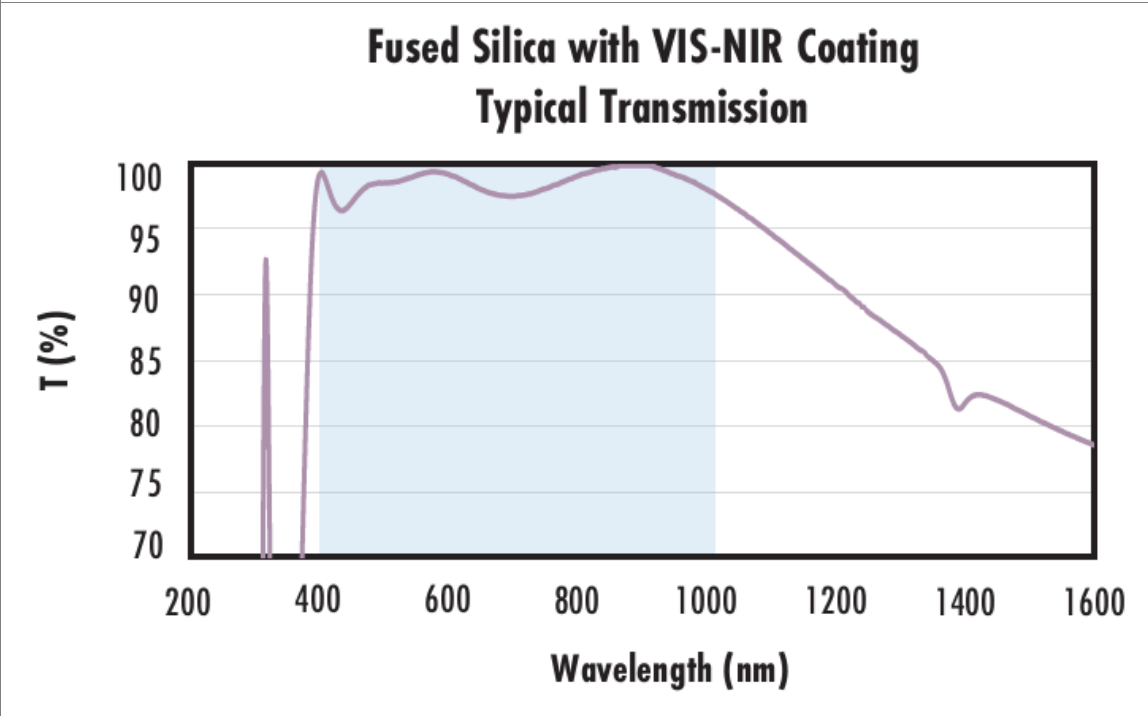
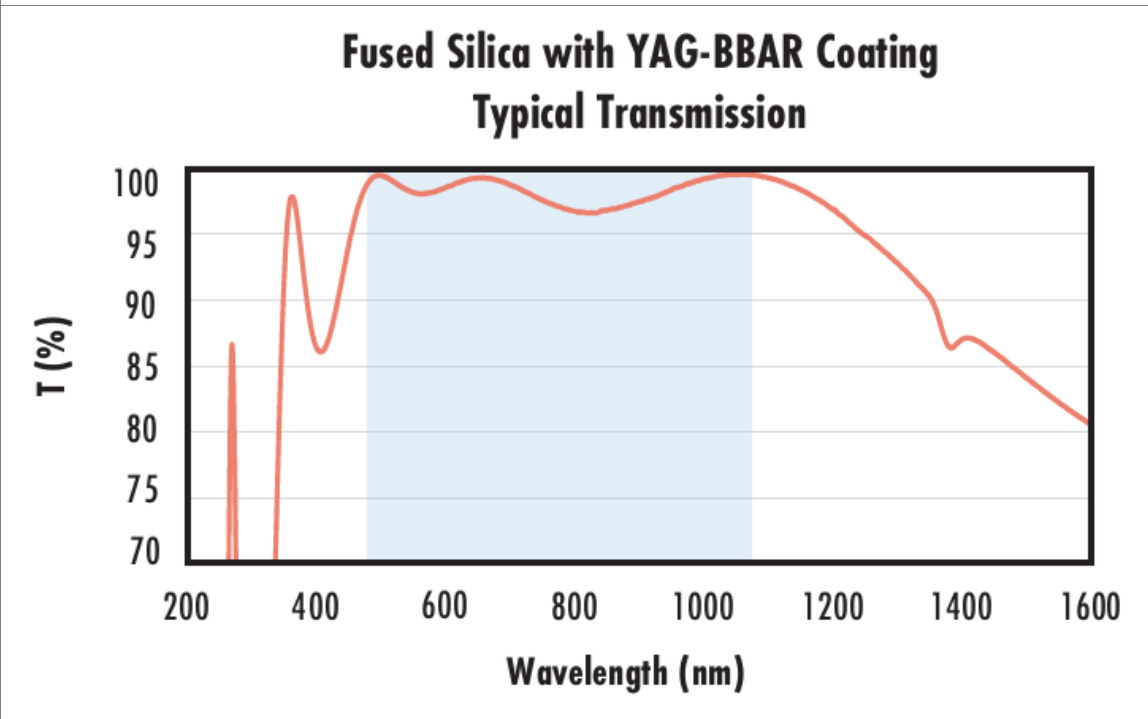
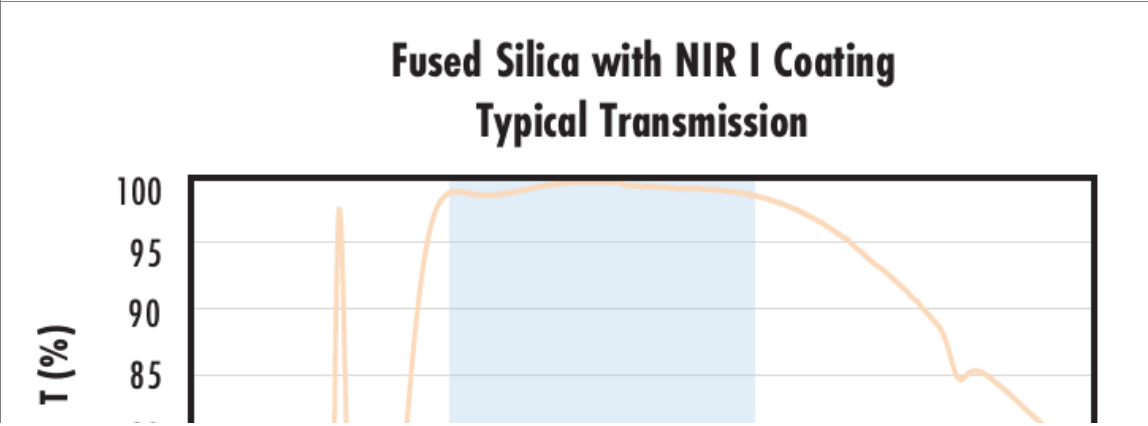
Product Details

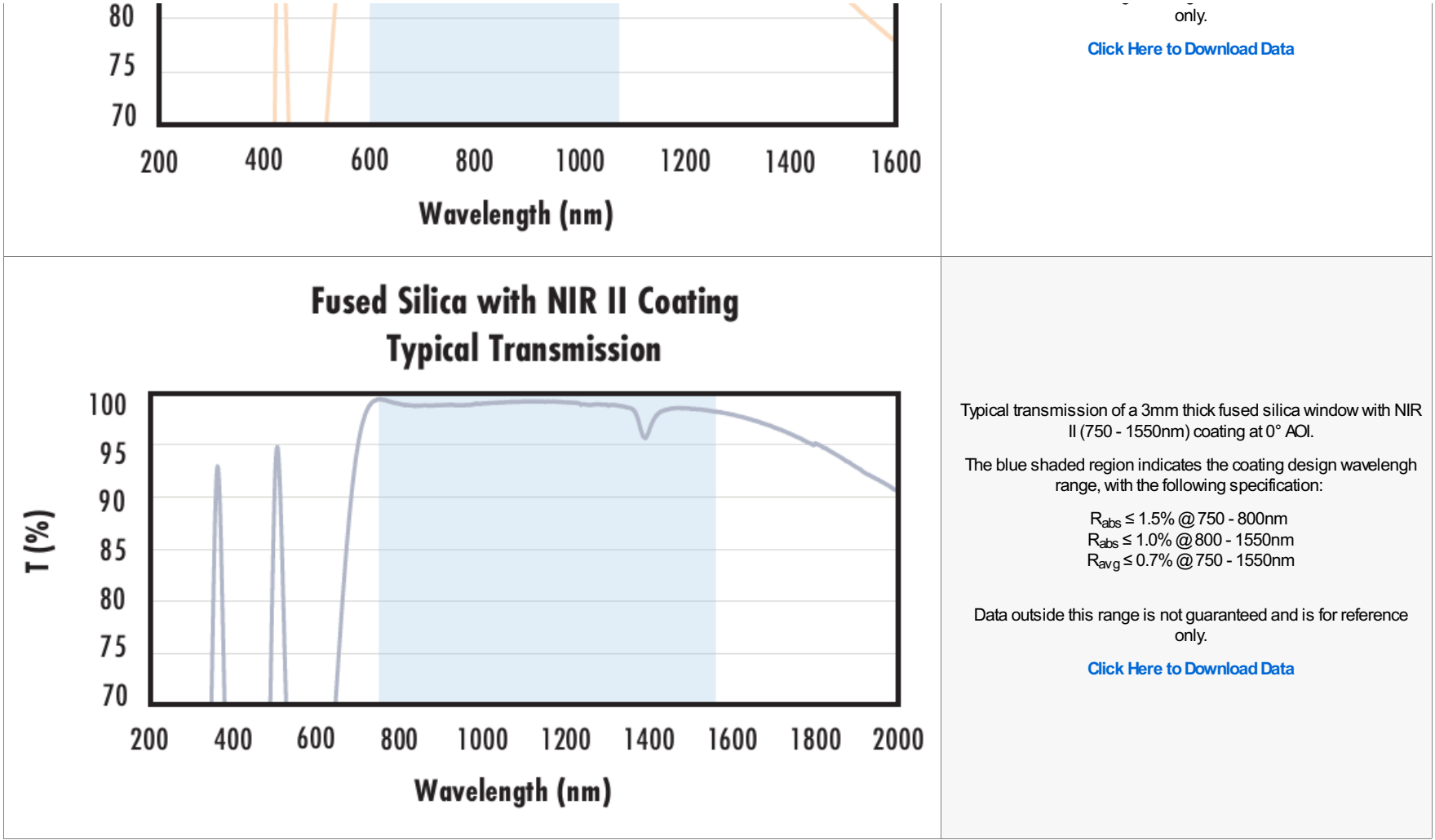
- UV Fused Silica Substrates with a 30 Arcminute Wedge
 - λ/10 Surface Flatness and 20-10 Surface Quality
 - Prevent Laser Instability When Used in Laser Cavities
 - N-BK7 Wedged Windows and Fused Silica Flat Windows Also Available
- TECHSPEC® Fused Silica Wedged Windows are manufactured from UV grade fused silica and feature a 30 arcminute wedge. The wedge of these windows eliminates Etalon effects by preventing back surface reflections from traveling along the same optical path as the transmitted beam. This protects against laser instability, mode-hopping, and power spikes when used in laser cavities and beam interference effects when used externally. TECHSPEC® Fused Silica Wedged Windows are ideal for use in UV or high power laser applications due to their high UV transmittance and insensitivity to temperature variations. These windows can also be used as beam pick-off optics or beam samplers to monitor laser beam properties such as beam power over time.

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: $R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$ (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: $R_{abs} \leq 1.0\% @ 250 - 425\text{nm}$ $R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$ $R_{avg} \leq 0.5\% @ 370 - 420\text{nm}$ 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: $R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$ $R_{avg} \leq 1.5\% @ 250 - 700\text{nm}$ 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.

 A line graph showing transmission T (%) on the y-axis (70 to 90) versus wavelength (nm) on the x-axis (200 to 1200). An orange curve shows transmission starting at ~350nm, rising sharply to ~90% at 400nm, and then gradually decreasing to ~78% at 1200nm. A blue shaded region covers the wavelength range from 350nm to 700nm.	The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.5\% @ 350 - 700nm$ 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  A line graph showing transmission T (%) on the y-axis (70 to 100) versus wavelength (nm) on the x-axis (200 to 1600). A purple curve shows transmission with several sharp peaks and valleys. A blue shaded region covers the wavelength range from 400nm to 1000nm.	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: $R_{abs} \leq 0.25\% @ 880nm$ $R_{avg} \leq 1.25\% @ 400 - 870nm$ $R_{avg} \leq 1.25\% @ 890 - 1000nm$ 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  A line graph showing transmission T (%) on the y-axis (70 to 100) versus wavelength (nm) on the x-axis (200 to 1200). A tan curve shows transmission starting at ~350nm, rising to ~100% at 400nm, and then gradually decreasing to ~75% at 1200nm. A blue shaded region covers the wavelength range from 425nm to 675nm.	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: $R_{avg} \leq 0.4\% @ 425 - 675nm$ 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  A line graph showing transmission T (%) on the y-axis (70 to 100) versus wavelength (nm) on the x-axis (200 to 1600). A red curve shows transmission with several sharp peaks and valleys. A blue shaded region covers the wavelength range from 500nm to 1100nm.	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: $R_{abs} \leq 0.25\% @ 532nm$ $R_{abs} \leq 0.25\% @ 1064nm$ $R_{avg} \leq 1.0\% @ 500 - 1100nm$ 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  A line graph showing transmission T (%) on the y-axis (85 to 100) versus wavelength (nm) on the x-axis (200 to 1600). An orange curve shows transmission starting at ~500nm, rising to ~100% at 600nm, and then gradually decreasing to ~85% at 1600nm. A blue shaded region covers the wavelength range from 600nm to 1050nm.	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.



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

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Compatible Mounts