

TECHSPEC[®] 50mm Dia., NIR I Coated, 30' Wedge, Fused Silica Wedged Window



TECHSPEC[®] Fused Silica Wedged Windows

Stock **#25-620** **6 In Stock**

-

1

+

€301⁰⁰

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Volume Pricing	
Qty 1-5	€301,00 each
Qty 6-25	€240,00 each
Qty 26-49	€225,00 each
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i Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Wedged Window	Type:
Physical & Mechanical Properties	
45.00	Clear Aperture CA (mm):
	Diameter (mm):

50.00 +0.0/-0.10	
3.00 ±0.20	Thickness (mm):
Fine Ground	Edges:
73	Young's Modulus (GPa):
30' ±10'	Wedge Angle (arcmin):

Optical Properties	
NIR I (600-1050nm)	Coating:
Fused Silica (Corning 7980)	Substrate: ☐
1.458	Index of Refraction (n _d):
20-10	Surface Quality:
Ravg ≤0.5% @ 600 - 1050nm	Coating Specification:
600 - 1050	Wavelength Range (nm):
λ/10	Surface Flatness (P-V):
7 J/cm2 @ 1064nm, 10ns	Damage Threshold, Reference:

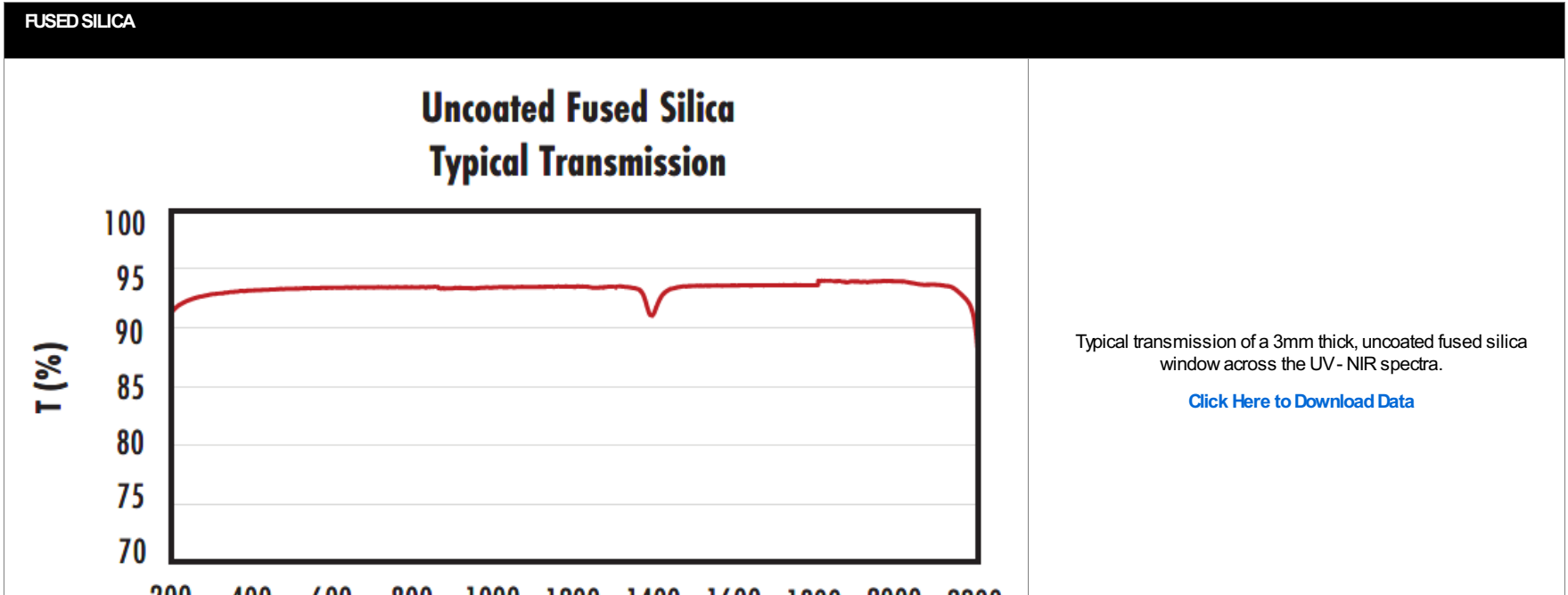
Material Properties	
Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C): 0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C)	

Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

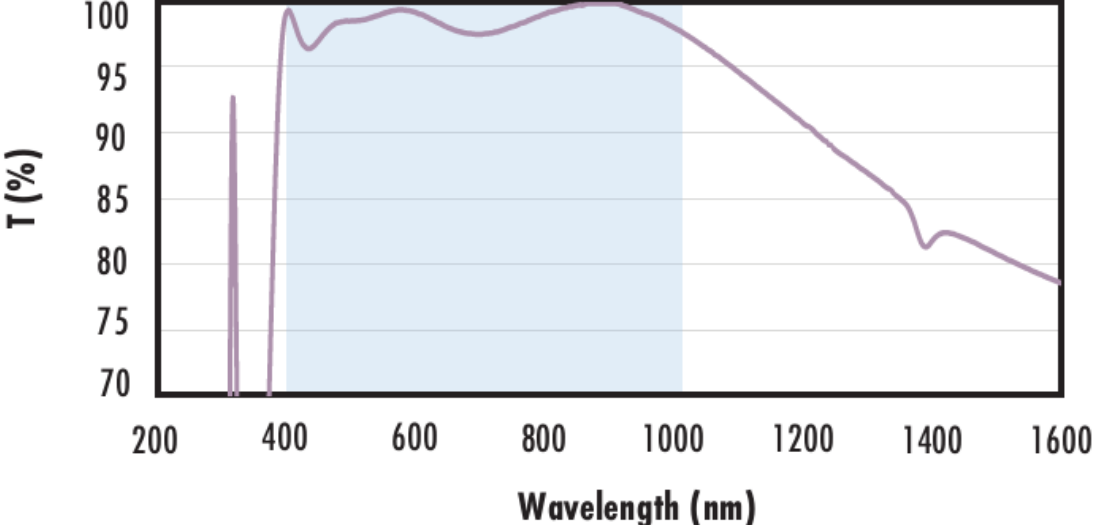
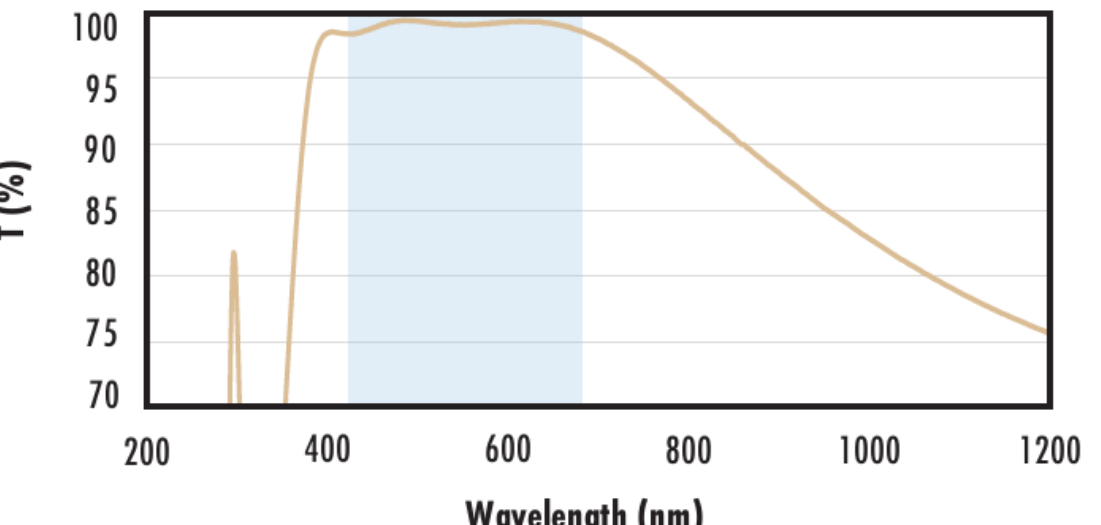
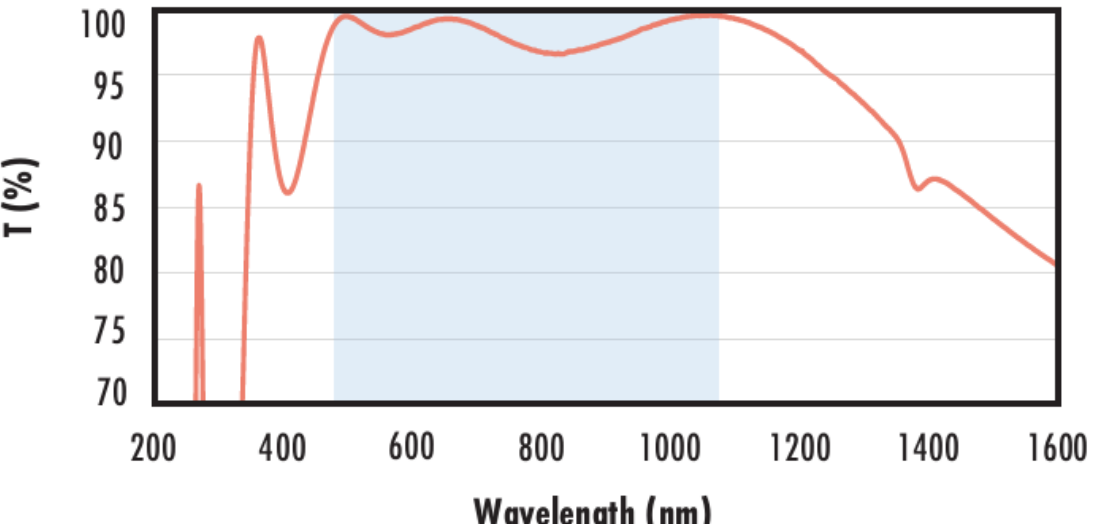
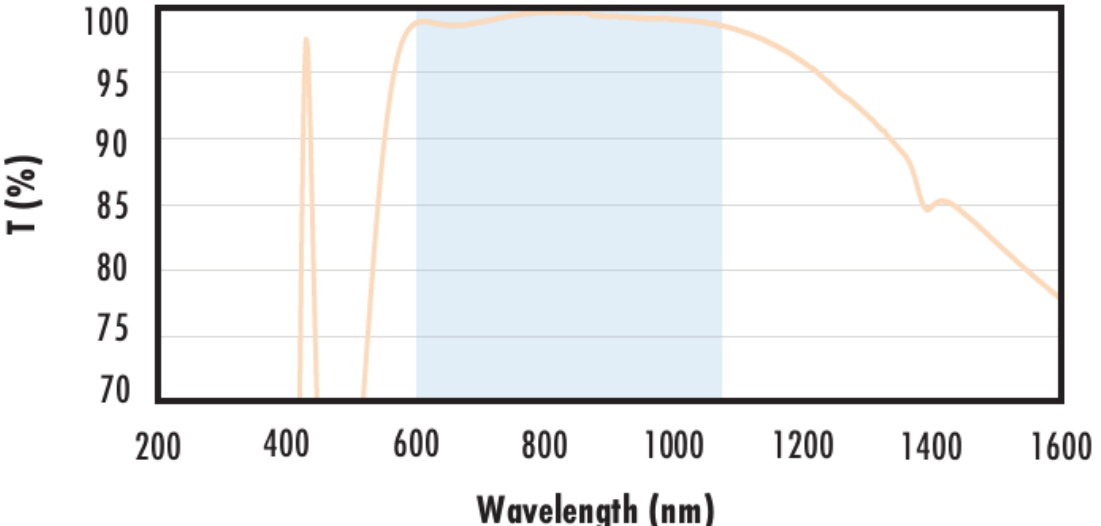
Product Details

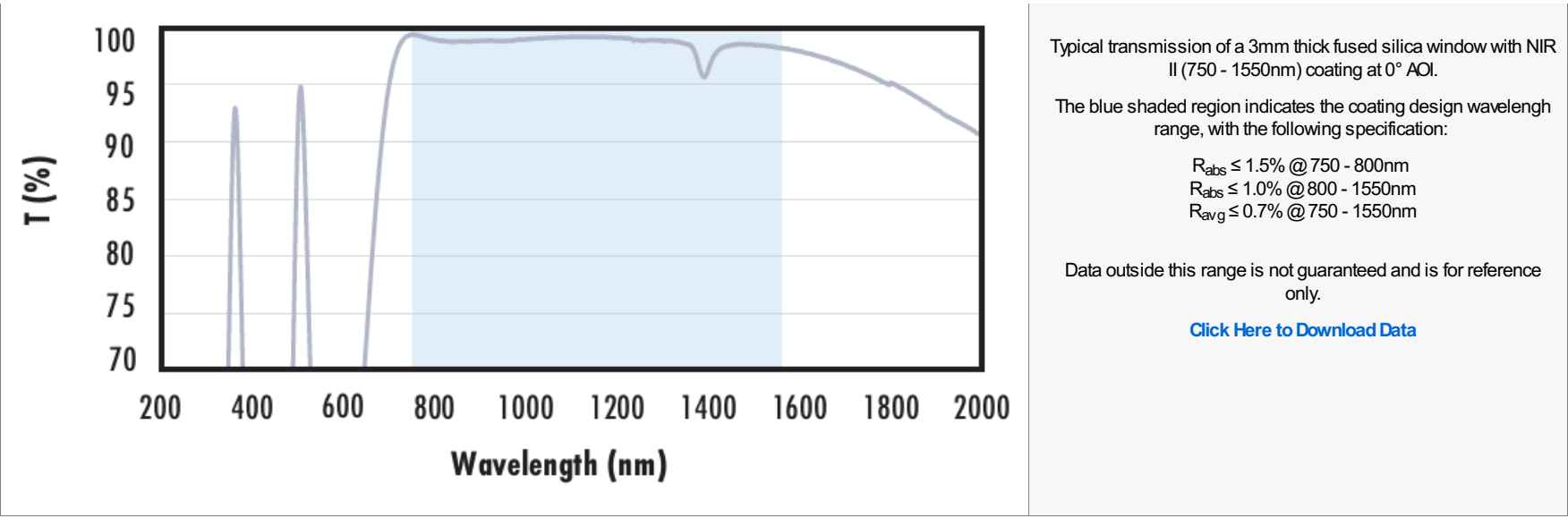
- UV Fused Silica Substrates with a 30 Arcminute Wedge
 - λ/10 Surface Flatness and 20-10 Surface Quality
 - Prevent Laser Instability When Used in Laser Cavities
 - N-BK7 Wedged Windows and Fused Silica Flat Windows Also Available
- TECHSPEC® Fused Silica Wedged Windows are manufactured from UV grade 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



2004006008001000120014001600180020002200 Wavelength (nm)	
Fused Silica with MgF₂ Coating Typical Transmission T (%) 100 95 90 85 80 75 70 2004006008001000120014001600180020002200 Wavelength (nm)	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} ≤ 1.75% @ 400 - 700nm (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 T (%) 100 95 90 85 80 75 70 20040060080010001200 Wavelength (nm)	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} ≤ 1.0% @ 250 - 425nm R_{avg} ≤ 0.75% @ 250 - 425nm R_{avg} ≤ 0.5% @ 370 - 420nm 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 T (%) 100 95 90 85 80 75 70 20040060080010001200 Wavelength (nm)	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} ≤ 1.0% @ 350 - 450nm R_{avg} ≤ 1.5% @ 250 - 700nm 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 T (%) 100 95 90 85 80 75 70 20040060080010001200 Wavelength (nm)	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} ≤ 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 	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 	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: $R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$ 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	



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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