

TECHSPEC[®] 50.8mm Dia., 5mm Thick, Uncoated λ /10 Fused Silica Window



Stock #15-404 20+ In Stock

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1

+

€280^{.00}

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Volume Pricing	
Qty 1-5	€280,00 each
Qty 6-25	€223,00 each
Qty 26-49	€209,00 each
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 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Protective Window

Physical & Mechanical Properties

Bevel:

Protective as needed

Clear Aperture (%):

80

40.64	Clear Aperture CA (mm):
50.80 +0.00/-0.20	Diameter (mm):
5.00 ±0.10	Thickness (mm):
Fine Ground	Edges:
522.00	Knoop Hardness (kg/mm ²):
<5	Parallelism (arcsec):
0.16	Poisson's Ratio:
73	Young's Modulus (GPa):

Optical Properties

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

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/cm ³):

Regulatory Compliance

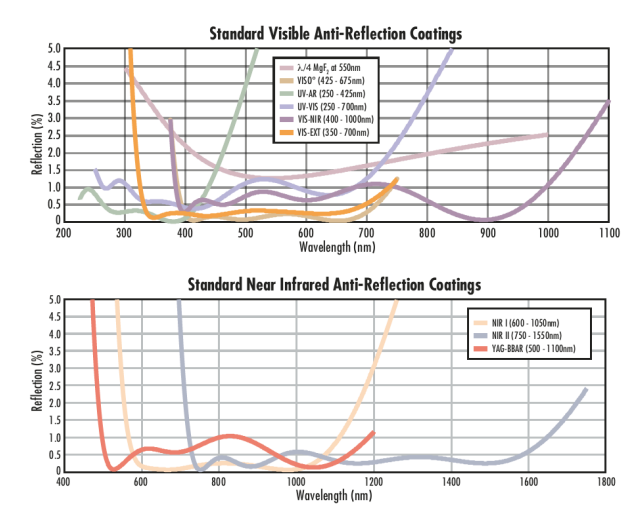
View	Certificate of Conformance:
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Product Details

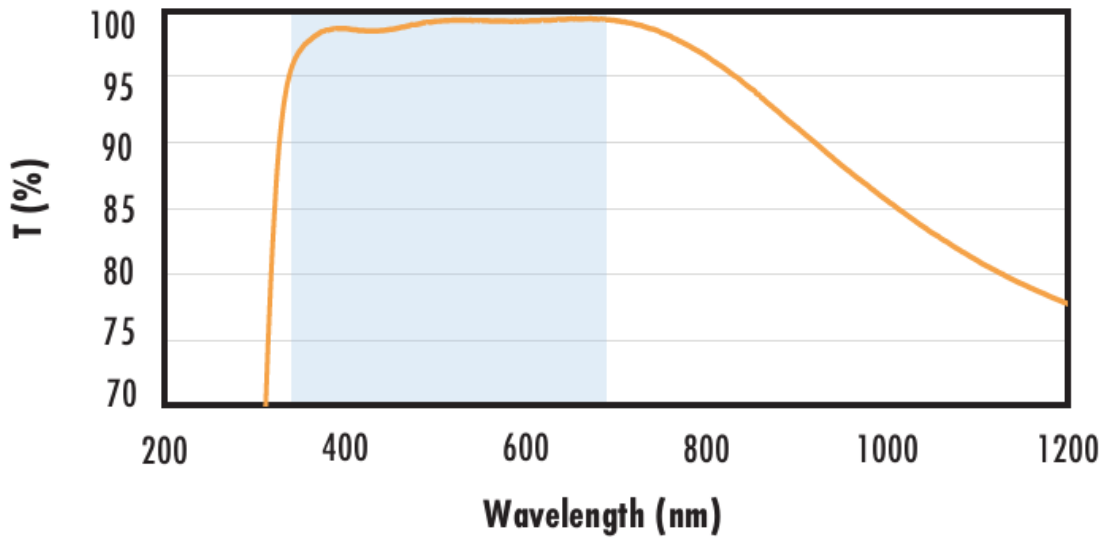
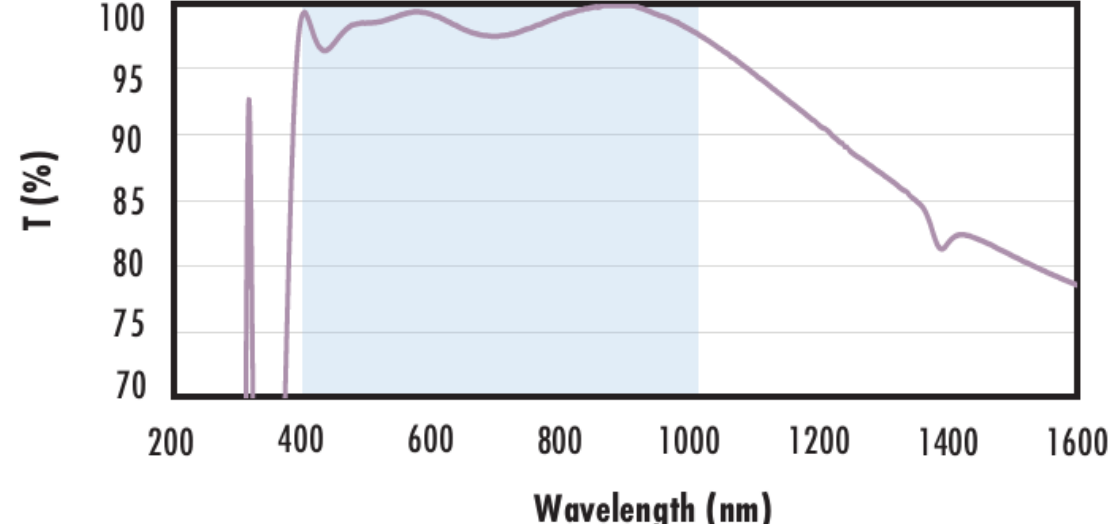
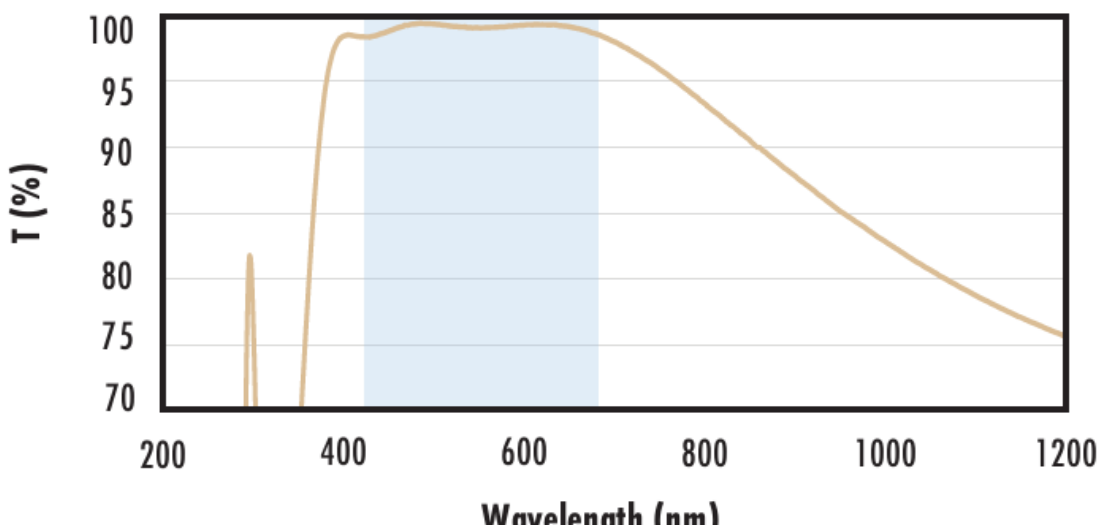
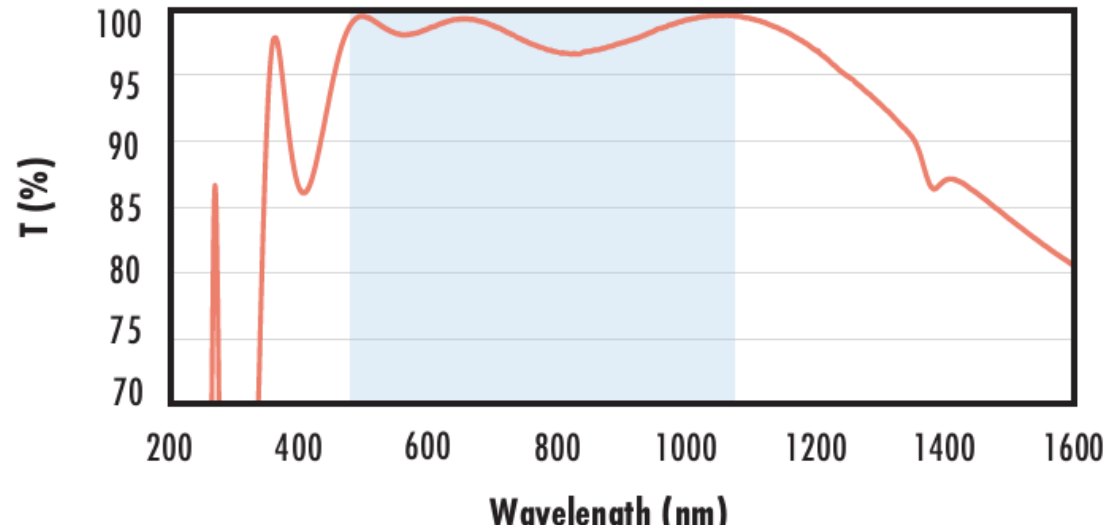
- UV, Visible, and NIR Anti-Reflection Coated Versions Available
- λ/10 Transmitted Wavefront Distortion
- Circular and Square Sizes from 2mm to 150mm
- 1λ or λ/4 UV Fused Silica Windows Also Available

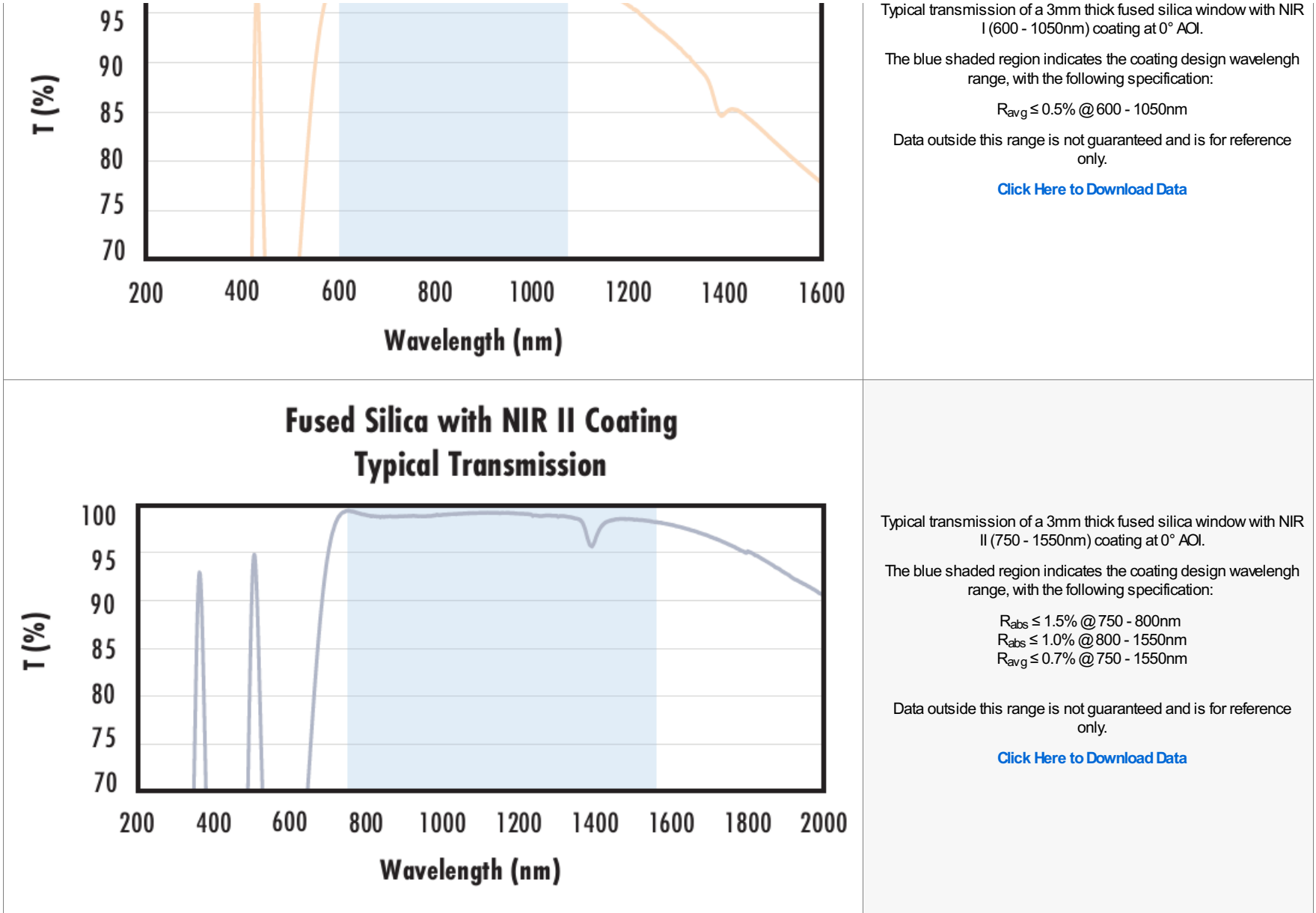
TECHSPEC® λ/10 UV Fused Silica Windows feature laser-grade surface quality and parallelism. In addition, these windows will limit the transmitted wavefront distortion to λ/10. The superior transmission characteristics, excellent thermal properties, and high tolerance manufacturing specifications make these windows an excellent choice for more demanding applications. TECHSPEC λ/10 UV Fused Silica Windows are available for purchase in circular and square sizes ranging from 2mm to 150mm.. These windows are offered uncoated or with anti-reflection coatings optimized for the UV or visible spectrum.

Technical Information



FUSED SILICA Uncoated Fused Silica Typical Transmission This line graph shows the typical transmission of a 3mm thick, uncoated fused silica window. The y-axis represents Transmittance (T) in percent, ranging from 70 to 100. The x-axis represents Wavelength in nanometers (nm), ranging from 200 to 2200. The transmission curve is a red line that starts at approximately 92% at 200 nm, rises to about 94% by 400 nm, and then remains relatively flat with minor fluctuations, including a small dip around 1400 nm, until it drops sharply after 2000 nm.	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 This line graph shows the typical transmission of a 3mm thick fused silica window with a MgF₂ coating. The y-axis represents Transmittance (T) in percent, ranging from 70 to 100. The x-axis represents Wavelength in nanometers (nm), ranging from 200 to 2200. The transmission curve is a pink line that starts at approximately 94% at 200 nm, rises to about 97% by 400 nm, and then remains relatively flat with minor fluctuations, including a small dip around 1400 nm, until it drops sharply after 2000 nm. A blue shaded region highlights the coating design wavelength range from 400 nm to 700 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: $R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$ (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 This line graph shows the typical transmission of a 3mm thick fused silica window with a UV-AR coating. The y-axis represents Transmittance (T) in percent, ranging from 70 to 100. The x-axis represents Wavelength in nanometers (nm), ranging from 200 to 1200. The transmission curve is a green line that starts at approximately 70% at 200 nm, rises sharply to about 99% by 250 nm, and then remains relatively flat with minor fluctuations, including a small dip around 400 nm, until it drops sharply after 1000 nm. A blue shaded region highlights the coating design wavelength range from 250 nm to 425 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: $R_{abs} \leq 1.0\% @ 250 - 425\text{nm}$ $R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$ $R_{avg} \leq 0.5\% @ 370 - 420\text{nm}$ 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 This line graph shows the typical transmission of a 3mm thick fused silica window with a UV-VIS coating. The y-axis represents Transmittance (T) in percent, ranging from 70 to 100. The x-axis represents Wavelength in nanometers (nm), ranging from 200 to 1200. The transmission curve is a purple line that starts at approximately 70% at 200 nm, rises sharply to about 97% by 250 nm, and then remains relatively flat with minor fluctuations, including a small dip around 400 nm, until it drops sharply after 1000 nm. A blue shaded region highlights the coating design wavelength range from 250 nm to 700 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: $R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$ $R_{avg} \leq 1.5\% @ 250 - 700\text{nm}$ 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. 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 	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 	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 	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 	



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