

TECHSPEC® 5mm Dia., 1mm Thick, Uncoated λ /10 Fused Silica Window



Stock #47-833 20+ In Stock

-

1

+

£105^{.60}

ADD TO CART

Volume Pricing	
Qty 1-5	£105.60 each
Qty 6-25	£84.00 each
Qty 26-49	£78.40 each
Need More?	Request Quote

!

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):

4.00

Diameter (mm):

5.00 +0.00/-0.10

1.00 ±0.10	Thickness (mm):
+0.00/-0.20	Dimensional Tolerance (mm):
Protective as needed	Bevel:
80	Clear Aperture (%):
Fine Ground	Edges:
<5	Parallelism (arcsec):
0.16	Poisson's Ratio:
73	Young's Modulus (GPa):
522.00	Knoop Hardness (kg/mm²):

Optical Properties

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

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):
7980 0G	Fused Silica Grade:

Regulatory Compliance

Compliant	RoHS 2015:
Compliant	Reach 219:
View	Certificate of Conformance:

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

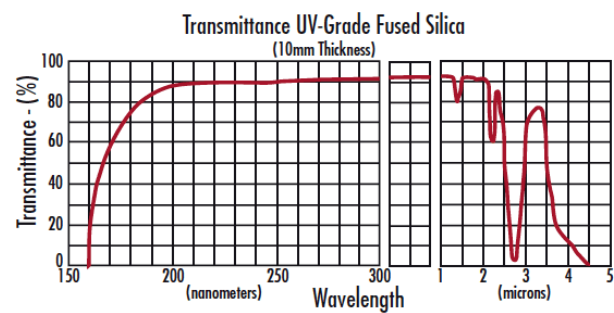
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

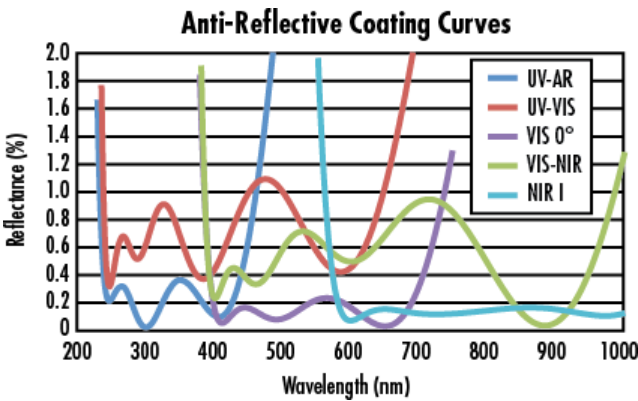
- UV, Visible, and NIR Anti-Reflection Coated Versions Available
- λ/10 Transmitted Wavefront Distortion
- Circular and Square Sizes from 2mm to 150mm
- [1λ](#) or [λ/4](#) UV Fused Silica Windows Also Available

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.

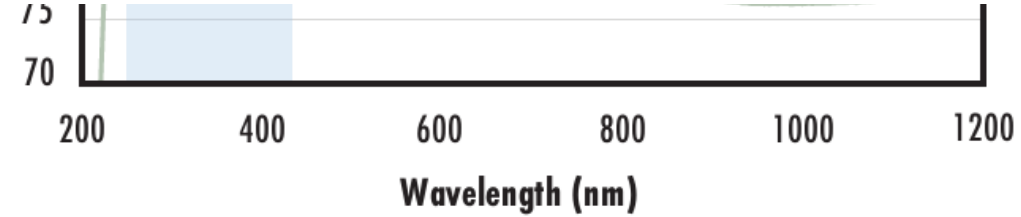
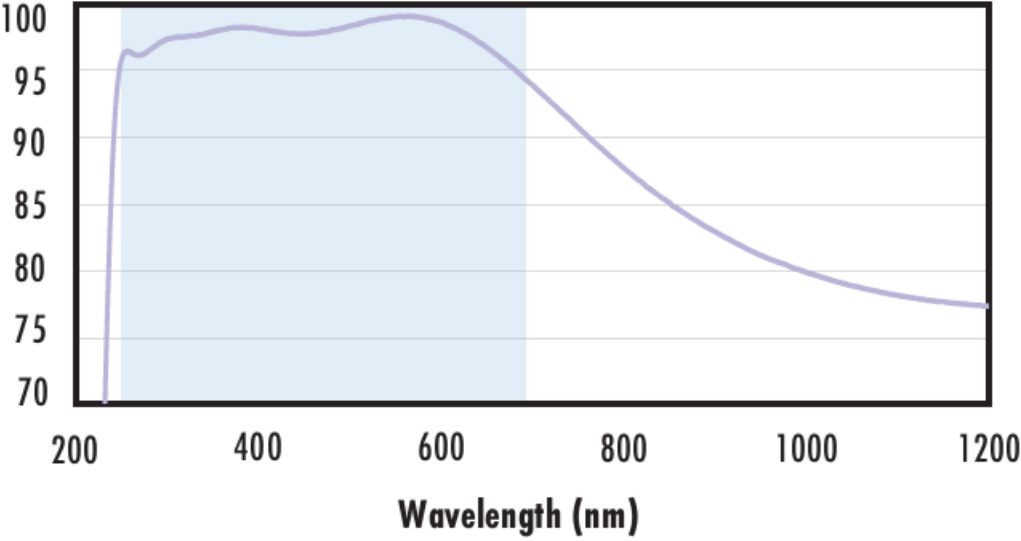
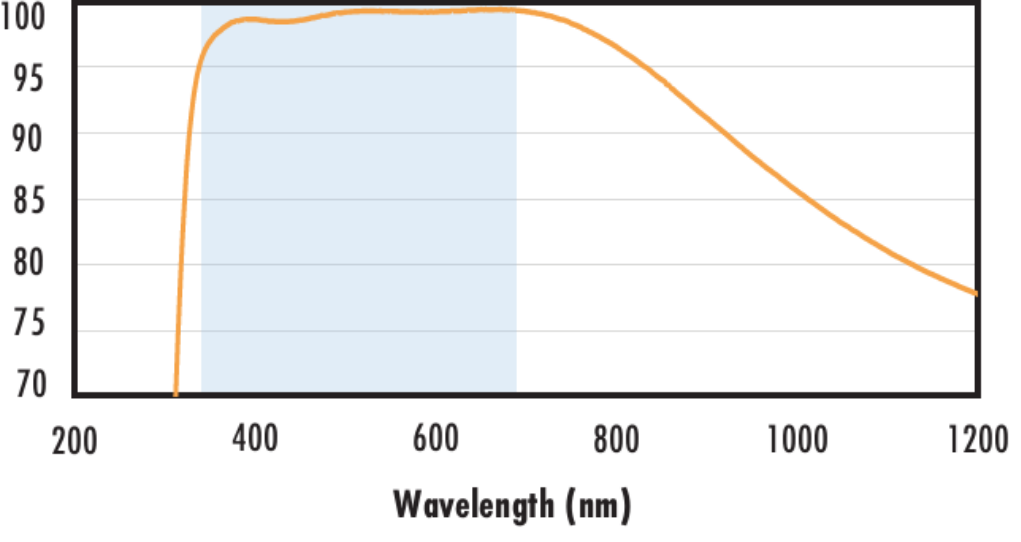
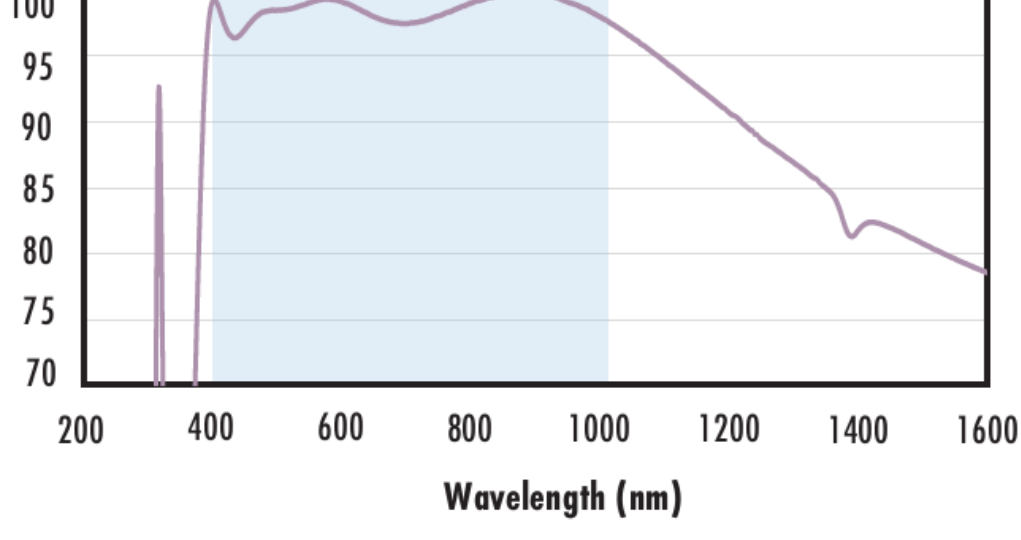
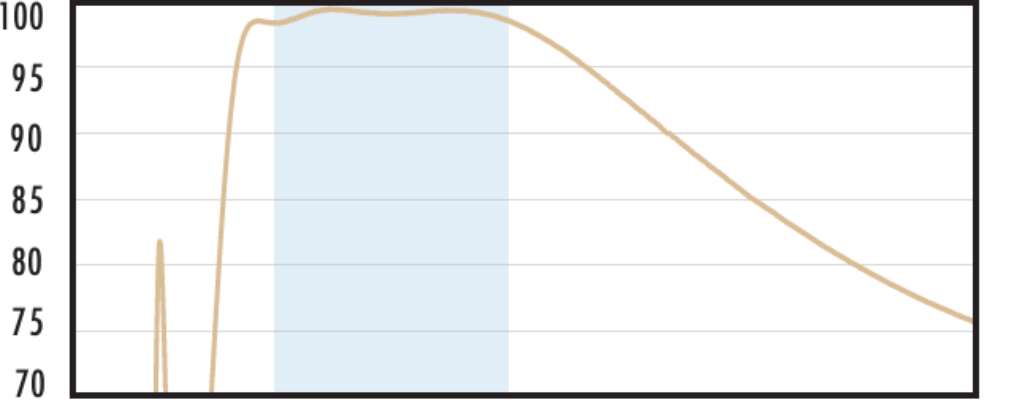
Technical Information



UV FS Transmission Curve



FUSED SILICA	
Uncoated Fused Silica Typical Transmission The graph shows the typical transmission of a 3mm thick, uncoated fused silica window. The x-axis represents wavelength in nanometers (200 to 2200). The y-axis represents transmission in percent (70 to 100). The curve shows high transmission (above 90%) from 200nm to 2200nm, with a sharp drop-off in the far-infrared region (above 2000nm).	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 The graph shows the typical transmission of a 3mm thick fused silica window with MgF₂ (400-700nm) coating at 0° AOI. The x-axis represents wavelength in nanometers (200 to 2200). The y-axis represents transmission in percent (70 to 100). The curve shows high transmission (above 90%) from 200nm to 2200nm, with a sharp drop-off in the far-infrared region (above 2000nm). A blue shaded region indicates the coating design wavelength range (400-700nm).	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: $R_{avg} \leq 1.75\% @ 400 - 700nm$ (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 The graph shows the typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI. The x-axis represents wavelength in nanometers (200 to 2200). The y-axis represents transmission in percent (75 to 100). The curve shows high transmission (above 90%) from 200nm to 2200nm, with a sharp drop-off in the far-infrared region (above 2000nm). A blue shaded region indicates the coating design wavelength range (250-425nm).	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: $R_{abs} \leq 1.0\% @ 250 - 425nm$ $R_{avg} \leq 0.75\% @ 250 - 425nm$ $R_{avg} \leq 0.5\% @ 370 - 420nm$ 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 	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: $R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$ 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

20040060080010001200 Wavelength (nm) Fused Silica with YAG-BBAR Coating Typical Transmission T (%) 100959085807570 2004006008001000120014001600 Wavelength (nm)	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
2004006008001000120014001600 Wavelength (nm) Fused Silica with NIR I Coating Typical Transmission T (%) 100959085807570 2004006008001000120014001600 Wavelength (nm)	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
200400600800100012001400160018002000 Wavelength (nm) Fused Silica with NIR II Coating Typical Transmission T (%) 100959085807570 200400600800100012001400160018002000 Wavelength (nm)	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

Compatible Mounts