

TECHSPEC[®] 75mm Dia., 4mm Thick, VIS-NIR Coated, $\lambda/4$ Fused Silica Window



TECHSPEC[®] $\lambda/4$ UV Fused Silica Windows

Stock #14-993 11 In Stock

-

1

+

S\$565⁶⁰

ADD TO CART

Volume Pricing	
Qty 1-5	S\$565.60 each
Qty 6-25	S\$450.80 each
Qty 26-49	S\$422.80 each
Need More?	Request Quote

Product Downloads

88.00

#Sorting:

General

Protective Window

Type:

Physical & Mechanical Properties

67.50

Clear Aperture CA (mm):

75.00 +0.00/-0.10	Diameter (mm):
4.00 ±0.10	Thickness (mm):
<1	Parallelism (arcmin):
+0.00/-0.10	Dimensional Tolerance (mm):
Protective as needed	Bevel:
90	Clear Aperture (%):
Fine Ground	Edges:
0.16	Poisson's Ratio:
73	Young's Modulus (GPa):
522.00	Knoop Hardness (kg/mm²):

Optical Properties	
VIS-NIR (400-1000nm)	Coating:
Fused Silica (Corning 7980)	Substrate: ☐
1.458	Index of Refraction (n _d):
40-20	Surface Quality:
λ/4	Transmitted Wavefront, P-V:
67.8	Abbe Number (v _d):
R _{abs} ≤0.25% @ 880nm R _{avg} ≤1.25% @ 400 - 870nm R _{avg} ≤1.25% @ 890 - 1000nm	Coating Specification:
400 - 1000	Wavelength Range (nm):
5 J/cm² @ 532nm, 10ns	Damage Threshold, Reference:

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:
View	Certificate of Conformance:
Compliant	REACH 241:

Product Details

- Available Uncoated or BBAR Coated for UV, Visible, and NIR
 - Ideal for Imaging Applications
 - Circular and Rectangular Sizes from 5 to 200mm
 - [1λ](#) or [λ/10](#) UVFused Silica Windows Also Available
- TECHSPEC® λ/4 UVFused Silica Windows are manufactured with 40-20 surface quality and λ/4 transmitted wavefront error specifications, making them ideal for imaging applications. Featuring UV fused silica substrates, these windows provide high transmission from the ultraviolet (UV) through the visible and near-infrared (NIR). Broadband anti-reflection (BBAR) coating options are available to minimize reflection losses and increase transmission. TECHSPEC λ/4 UVFused Silica Windows are used in optical imaging applications, in low to medium powered laser applications, and as protective windows, especially in applications requiring transmission of UV light.

Technical Information



FUSED SILICA																																			
Uncoated Fused Silica Typical Transmission <table border="1"><caption>Approximate data for Uncoated Fused Silica Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>92</td></tr><tr><td>400</td><td>94</td></tr><tr><td>600</td><td>94</td></tr><tr><td>800</td><td>94</td></tr><tr><td>1000</td><td>94</td></tr><tr><td>1200</td><td>94</td></tr><tr><td>1400</td><td>92</td></tr><tr><td>1600</td><td>94</td></tr><tr><td>1800</td><td>94</td></tr><tr><td>2000</td><td>94</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	92	400	94	600	94	800	94	1000	94	1200	94	1400	92	1600	94	1800	94	2000	94	2200	90	Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra. Click Here to Download Data										
Wavelength (nm)	Transmission T (%)																																		
200	92																																		
400	94																																		
600	94																																		
800	94																																		
1000	94																																		
1200	94																																		
1400	92																																		
1600	94																																		
1800	94																																		
2000	94																																		
2200	90																																		
Fused Silica with MgF₂ Coating Typical Transmission <table border="1"><caption>Approximate data for Fused Silica with MgF2 Coating Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>94</td></tr><tr><td>400</td><td>96</td></tr><tr><td>600</td><td>96</td></tr><tr><td>800</td><td>95</td></tr><tr><td>1000</td><td>95</td></tr><tr><td>1200</td><td>95</td></tr><tr><td>1400</td><td>93</td></tr><tr><td>1600</td><td>95</td></tr><tr><td>1800</td><td>95</td></tr><tr><td>2000</td><td>95</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	94	400	96	600	96	800	95	1000	95	1200	95	1400	93	1600	95	1800	95	2000	95	2200	90	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										
Wavelength (nm)	Transmission T (%)																																		
200	94																																		
400	96																																		
600	96																																		
800	95																																		
1000	95																																		
1200	95																																		
1400	93																																		
1600	95																																		
1800	95																																		
2000	95																																		
2200	90																																		
Fused Silica with UV-AR Coating Typical Transmission <table border="1"><caption>Approximate data for Fused Silica with UV-AR Coating Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>75</td></tr><tr><td>250</td><td>98</td></tr><tr><td>300</td><td>99</td></tr><tr><td>350</td><td>99</td></tr><tr><td>400</td><td>99</td></tr><tr><td>425</td><td>100</td></tr><tr><td>500</td><td>99</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>95</td></tr><tr><td>1000</td><td>85</td></tr><tr><td>1200</td><td>78</td></tr><tr><td>1400</td><td>75</td></tr><tr><td>1600</td><td>75</td></tr><tr><td>1800</td><td>75</td></tr><tr><td>2000</td><td>76</td></tr><tr><td>2200</td><td>77</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	75	250	98	300	99	350	99	400	99	425	100	500	99	600	98	800	95	1000	85	1200	78	1400	75	1600	75	1800	75	2000	76	2200	77	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
Wavelength (nm)	Transmission T (%)																																		
200	75																																		
250	98																																		
300	99																																		
350	99																																		
400	99																																		
425	100																																		
500	99																																		
600	98																																		
800	95																																		
1000	85																																		
1200	78																																		
1400	75																																		
1600	75																																		
1800	75																																		
2000	76																																		
2200	77																																		

	
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}$$R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with VIS-EXT Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with VIS-NIR Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$$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

