

TECHSPEC[®] 50mm Dia., 4mm Thick, Uncoated, $\lambda/4$ Fused Silica Window



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

Stock **#14-966** **5 In Stock**

-

1

+

₹12,983

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Volume Pricing	
Qty 1-5	₹12,983 each
Qty 6-25	₹10,306 each
Qty 26-49	₹9,682 each
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Product Downloads

78.00

#Sorting:

General

Protective Window

Type:

Physical & Mechanical Properties

45.00

Clear Aperture CA (mm):

50.00 +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

Uncoated	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):
200 - 2200	Wavelength Range (nm):

Material Properties

2.20	Density (g/cm³):
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)	
7980 0G	Fused Silica Grade:

Regulatory Compliance

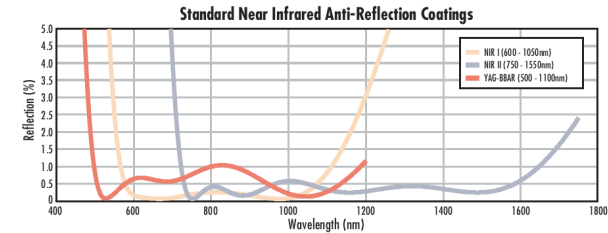
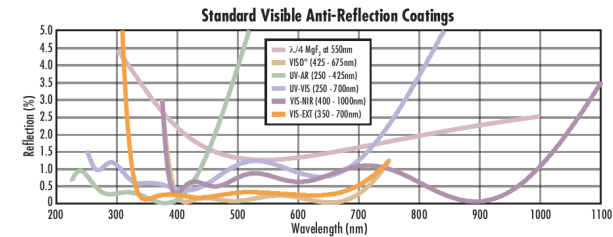
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	REACH 241:
Vietnam	Country of Origin:
Edmund Optics India Private Limited	Imported By:

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](#) UV Fused Silica Windows Also Available

TECHSPEC® λ/4 UV Fused 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 UV Fused Silica Wndows 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																										
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1600	94																										
1800	94																										
2000	94																										
2200	90																										
Fused Silica with MgF₂ Coating Typical Transmission <table border="1"><caption>Approximate data for MgF2 Coated Fused Silica 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>96</td></tr><tr><td>1000</td><td>96</td></tr><tr><td>1200</td><td>96</td></tr><tr><td>1400</td><td>94</td></tr><tr><td>1600</td><td>96</td></tr><tr><td>1800</td><td>96</td></tr><tr><td>2000</td><td>96</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	94	400	96	600	96	800	96	1000	96	1200	96	1400	94	1600	96	1800	96	2000	96	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	96																										
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2200	90																										
Fused Silica with UV-AR Coating Typical Transmission <table border="1"><caption>Approximate data for UV-AR Coated Fused Silica 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>99</td></tr><tr><td>400</td><td>99</td></tr><tr><td>600</td><td>99</td></tr><tr><td>800</td><td>99</td></tr><tr><td>1000</td><td>95</td></tr><tr><td>1200</td><td>85</td></tr><tr><td>1400</td><td>78</td></tr><tr><td>1600</td><td>76</td></tr><tr><td>1800</td><td>76</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	99	400	99	600	99	800	99	1000	95	1200	85	1400	78	1600	76	1800	76	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	99																										
400	99																										
600	99																										
800	99																										
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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: $R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$ $R_{avg} \leq 1.5\% @ 250 - 700\text{nm}$ 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

