

TECHSPEC[®] 50mm Dia. 5mm Thick YAG-BBAR Coated, 1λ Fused Silica Window



TECHSPEC[®] 1λ UV Fused Silica Windows

Stock **#25-238** **2 In Stock**

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1

+

₹11,223

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Volume Pricing	
Qty 1-5	₹11,223 each
Qty 6-25	₹8,949 each
Qty 26-49	₹8,362 each
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General	
Protective Window	Type:
Physical & Mechanical Properties	
45.00	Clear Aperture CA (mm):
50.00 +0.00/-0.20	Diameter (mm):

5.00 ±0.38	Thickness (mm):
<5	Parallelism (arcmin):
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

YAG-BBAR (500-1100nm)	Coating:
Fused Silica (Corning 7980)	Substrate: ☐
1.458	Index of Refraction (n _d):
60-40	Surface Quality:
1λ	Transmitted Wavefront, P-V:
67.8	Abbe Number (v _d):
R _{abs} ≤0.25% @ 532nm R _{abs} ≤0.25% @ 1064nm R _{avg} ≤1.0% @ 500 - 1100nm	Coating Specification:
500 - 1100	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 235:
Vietnam	Country of Origin:
Edmund Optics India Private Limited	Imported By:

Need different specs or modifications?

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

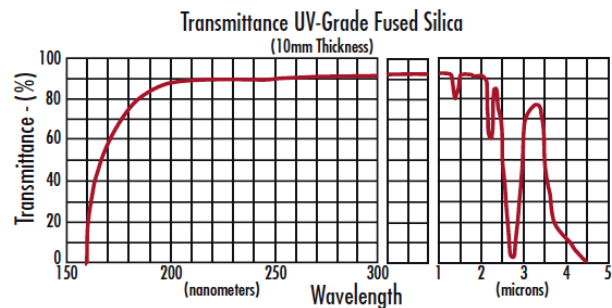
- Available Uncoated or with Broadband Anti-Reflection Coatings
- Ideal for Cost Sensitive Broadband Applications
- Circular and Square Sizes from 5mm to 100mm
- $\lambda/4$ or $\lambda/10$ UV Fused Silica Windows Also Available

TECHSPEC® 1λ UV Fused Silica Windows are precision manufactured using UV-grade synthetic fused silica. In addition to superior transmission, the synthetic fused silica of these optical windows exhibits higher thermal properties, exceptional purity, and excellent environmental durability for demanding applications. The windows are ideal for cost-sensitive broadband applications and are available uncoated or with broadband anti-reflection coatings.

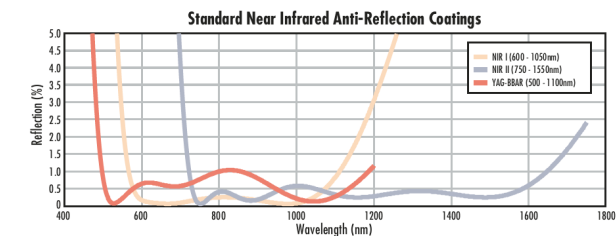
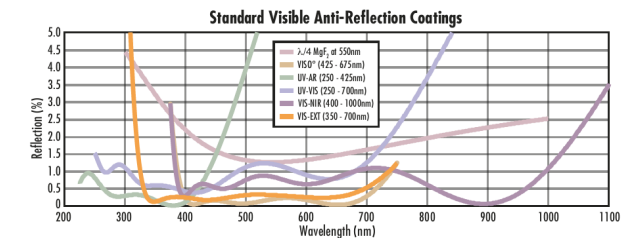
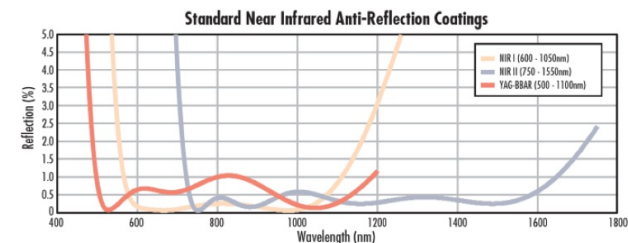
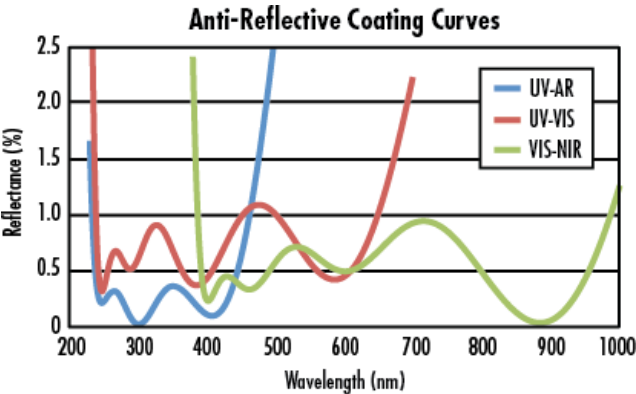
TECHSPEC® 1λ UV Fused Silica Windows have circular and square sizes ranging from 5mm to 100mm. $\lambda/4$ or $\lambda/10$ UV Fused Silica Windows are also available.

Note: New additions to this product family may be specified with a transmitted wavefront distortion (TWD) specification instead of a surface flatness. For more information on the difference between these two specifications, see our application note on [Understanding Optical Windows](#).

Technical Information

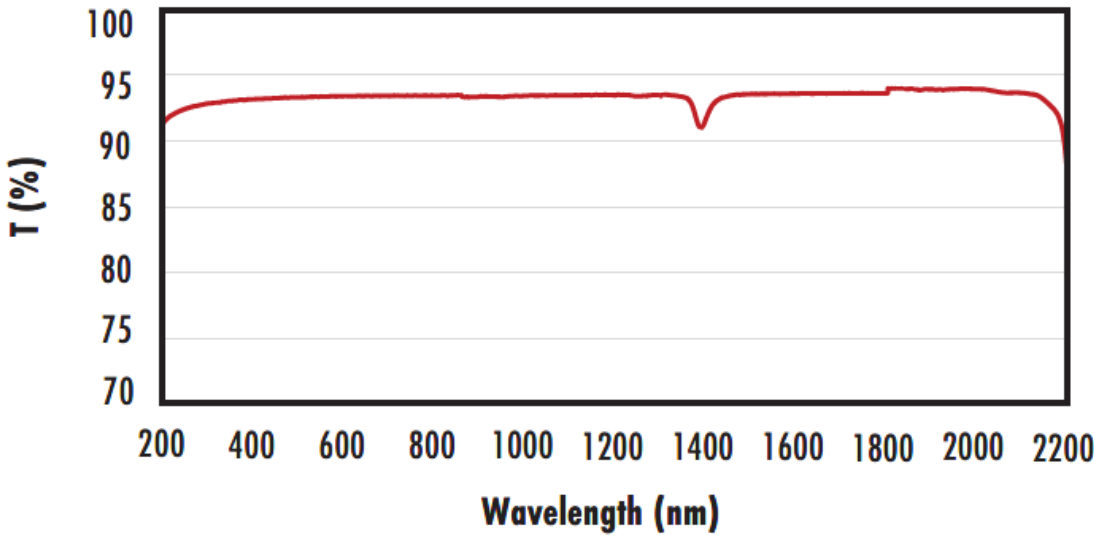


UV FS Transmission Curve



FUSED SILICA

Uncoated Fused Silica Typical Transmission



Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.

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Figure 1 is a line graph showing the transmittance (T (%)) of the Ag/AgCl-coated glass substrate as a function of wavelength (nm). The x-axis represents Wavelength (nm) from 200 to 1200, and the y-axis represents T (%) from 70 to 100. The transmittance is high (near 100%) in the visible range (400-700 nm) and decreases significantly in the near-infrared range (700-1200 nm). A shaded blue region highlights the visible range.

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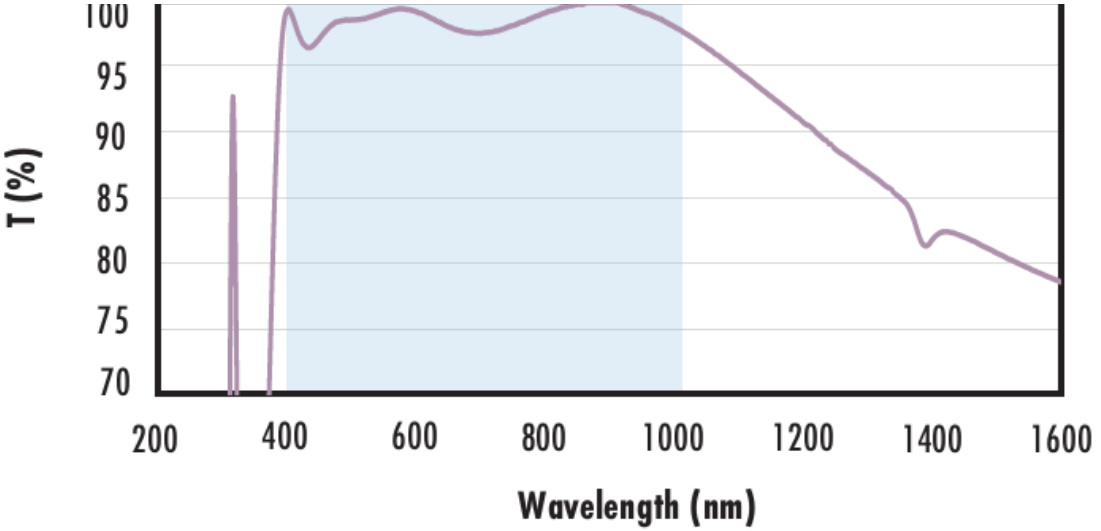
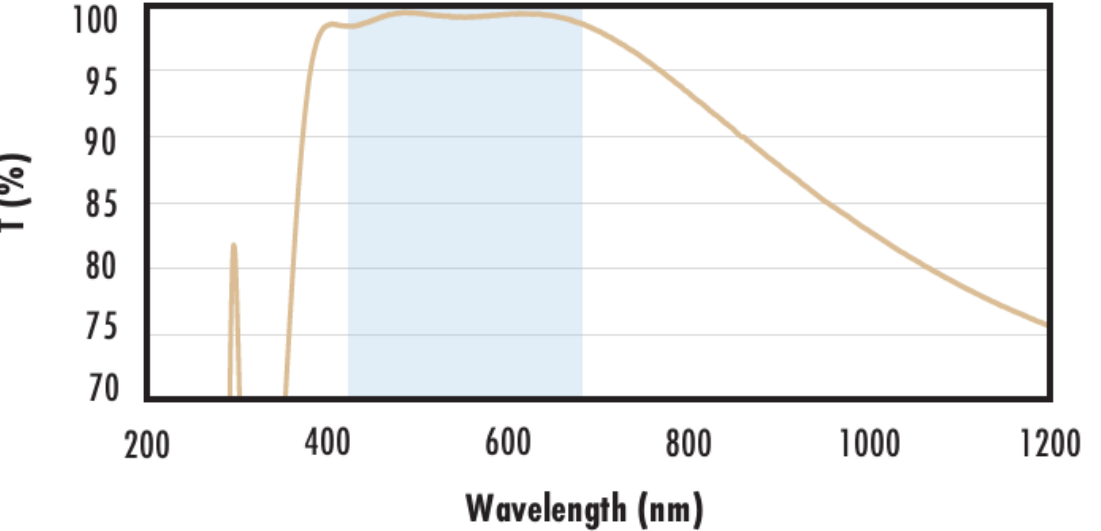
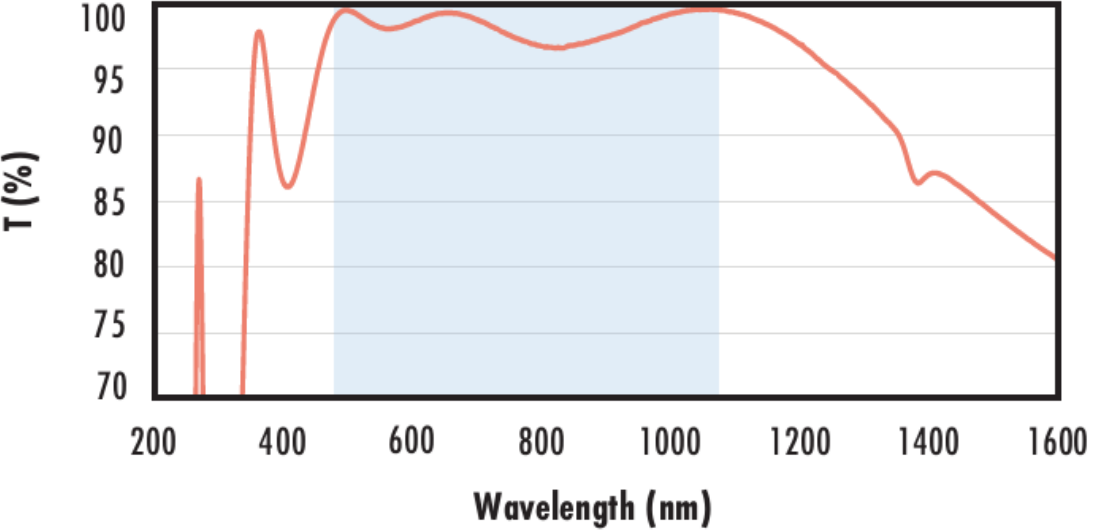
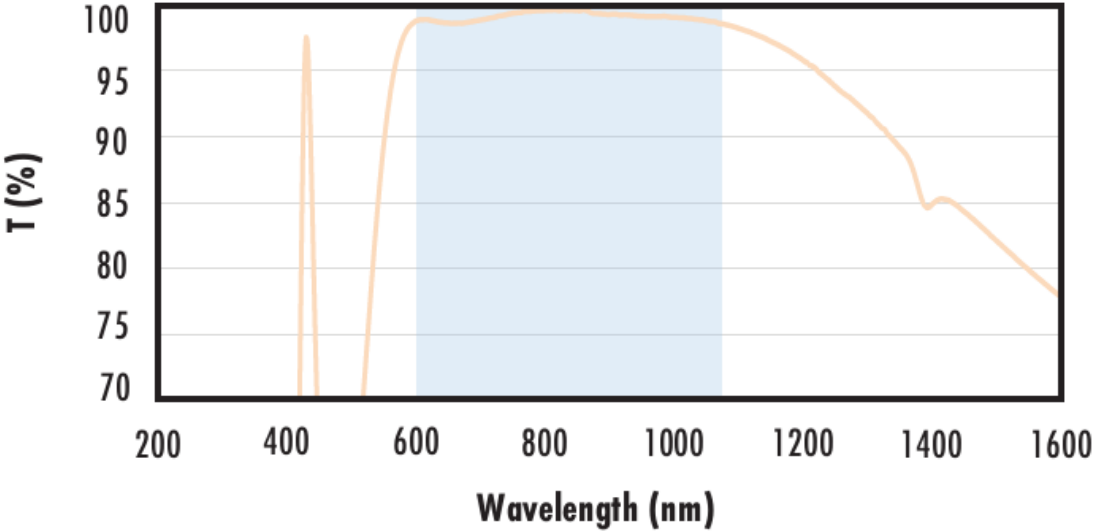
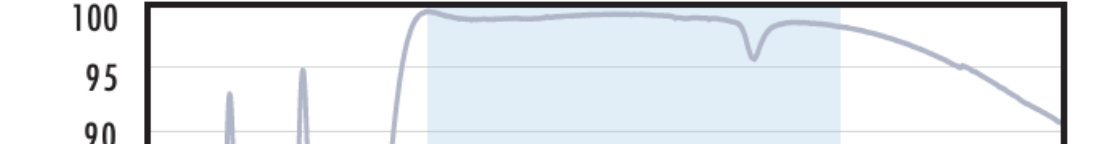
Wavelength (nm)	Transmittance T (%)
200	70
250	97
300	98
400	99
500	99
550	100
600	99
700	95
800	88
900	82
1000	78
1100	77
1200	77

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Wavelength (nm)	Transmittance T (%)
200	0
300	0
350	98
400	99
500	100
600	100
700	100
800	95
900	88
1000	82
1100	78
1200	75

[Click Here to Download Data](#)

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	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 	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
Fused Silica with NIR II Coating Typical Transmission 	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:

