

TECHSPEC<sup>®</sup> 50mm Sq., 5mm Thick, UV-VIS Coated  $\lambda$ /10 Fused Silica Window



Stock #24-313 5 In Stock

-

1

+

₹20,098

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | ₹20,098 each                  |
| Qty 6-25       | ₹16,027 each                  |
| Qty 26-49      | ₹15,037 each                  |
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General

Type:Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):45.00 x 45.00

Dimensions (mm):50.00 x 50.00 +0.00/-0.20

|                      |                          |
|----------------------|--------------------------|
| 5.00 ±0.10           | Thickness (mm):          |
| Protective as needed | Bevel:                   |
| 90                   | 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                                                           |                                                       |
| UV-VIS (250-700nm)                                                           | Coating:                                              |
| <a href="#">Fused Silica</a> Coming 7980                                     | Substrate: <input type="checkbox"/>                   |
| 1.458                                                                        | Index of Refraction (n <sub>d</sub> ):                |
| 20-10                                                                        | Surface Quality:                                      |
| λ/10                                                                         | Transmitted Wavefront, P-V:                           |
| 67.8                                                                         | Abbe Number (v <sub>d</sub> ):                        |
| R <sub>abs</sub> ≤1.0% @ 350 - 450nm<br>R <sub>avg</sub> ≤1.5% @ 250 - 700nm | Coating Specification:                                |
| 250 - 700                                                                    | Wavelength Range (nm):                                |
| 3 J/cm² @ 355nm, 10ns<br>5 J/cm² @ 532nm, 10ns                               | Damage Threshold, Reference: <input type="checkbox"/> |

|                                                                   |                                                              |
|-------------------------------------------------------------------|--------------------------------------------------------------|
| Material Properties                                               |                                                              |
| 2.20                                                              | Density (g/cm³):                                             |
| 0.52 (+5 to +35°C)<br>0.57 (0 to +200°C)<br>0.48 (-100 to +200°C) | Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C): |

|                                     |                             |
|-------------------------------------|-----------------------------|
| Regulatory Compliance               |                             |
| <a href="#">Compliant</a>           | RoHS 2015:                  |
| <a href="#">View</a>                | Certificate of Conformance: |
| <a href="#">Compliant</a>           | 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

- UV, Visible, and NIR Anti-Reflection Coated Versions Available
- λ/10 Transmitted Wavefront Distortion

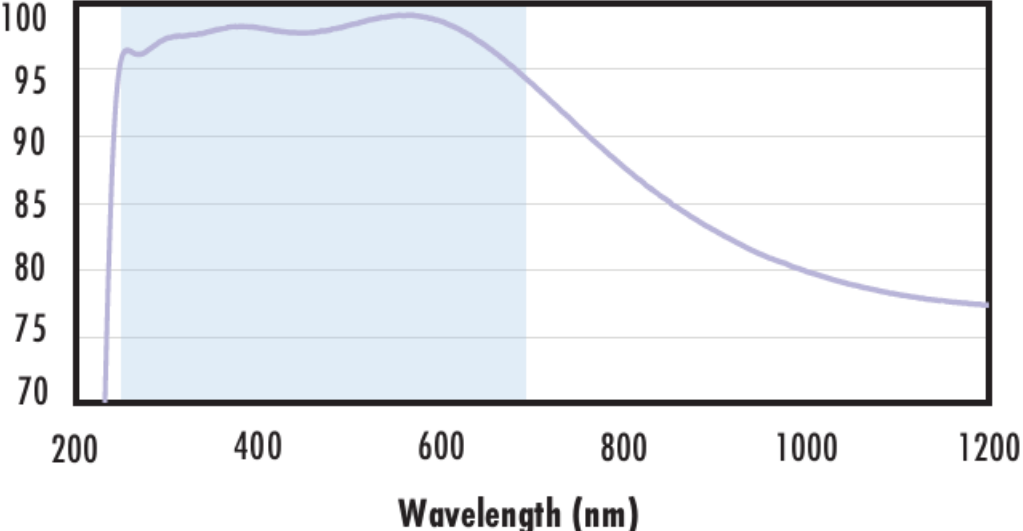
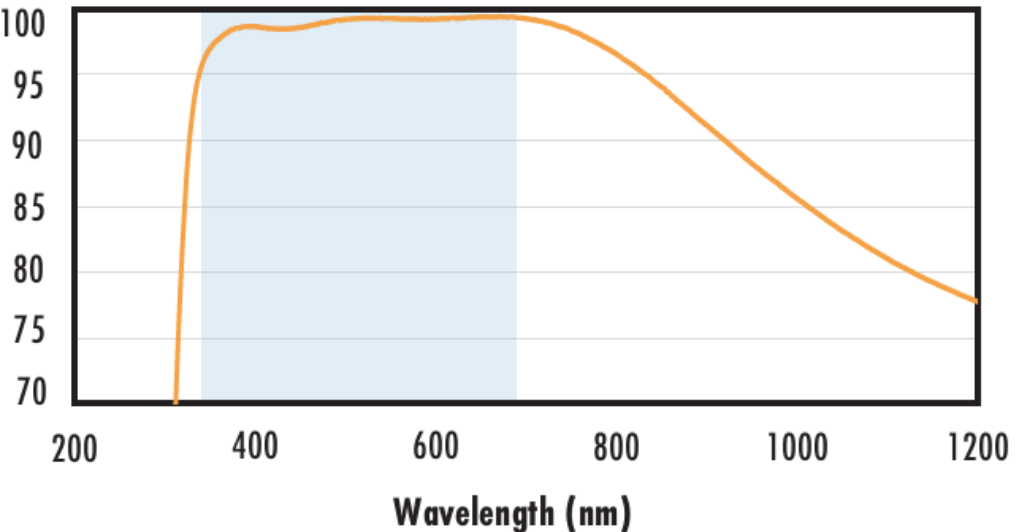
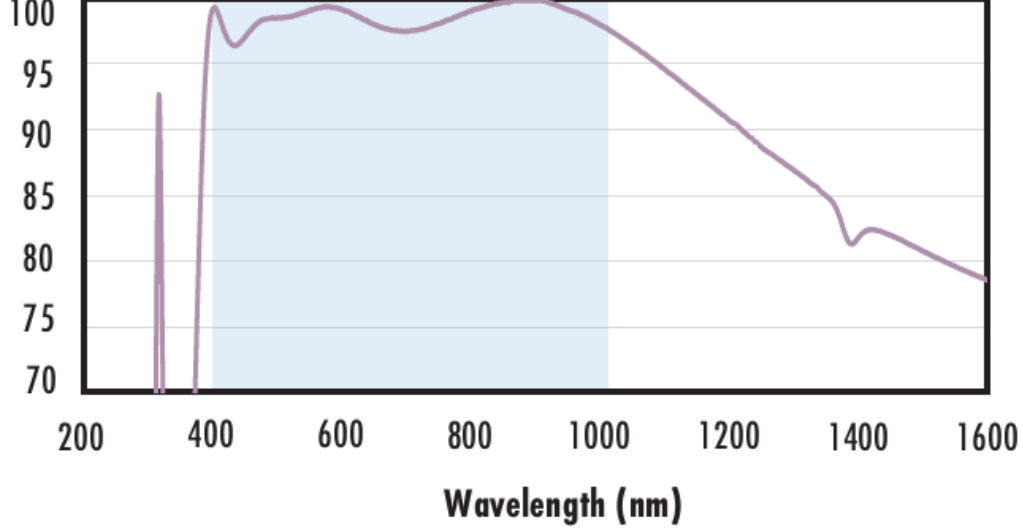
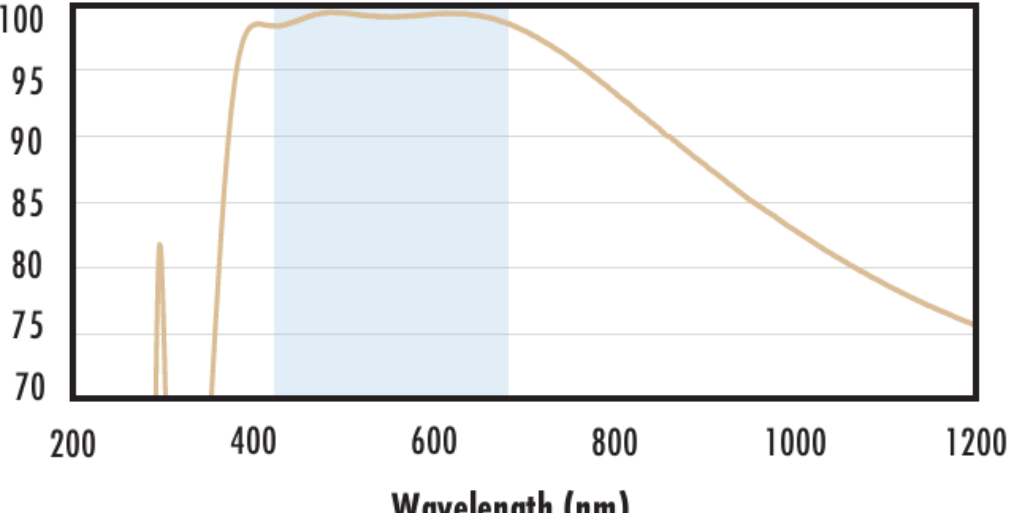
- Circular and Square Sizes from 2mm to 150mm
- [1λ](#) or [λ/4](#) UV Fused Silica Windows Also Available

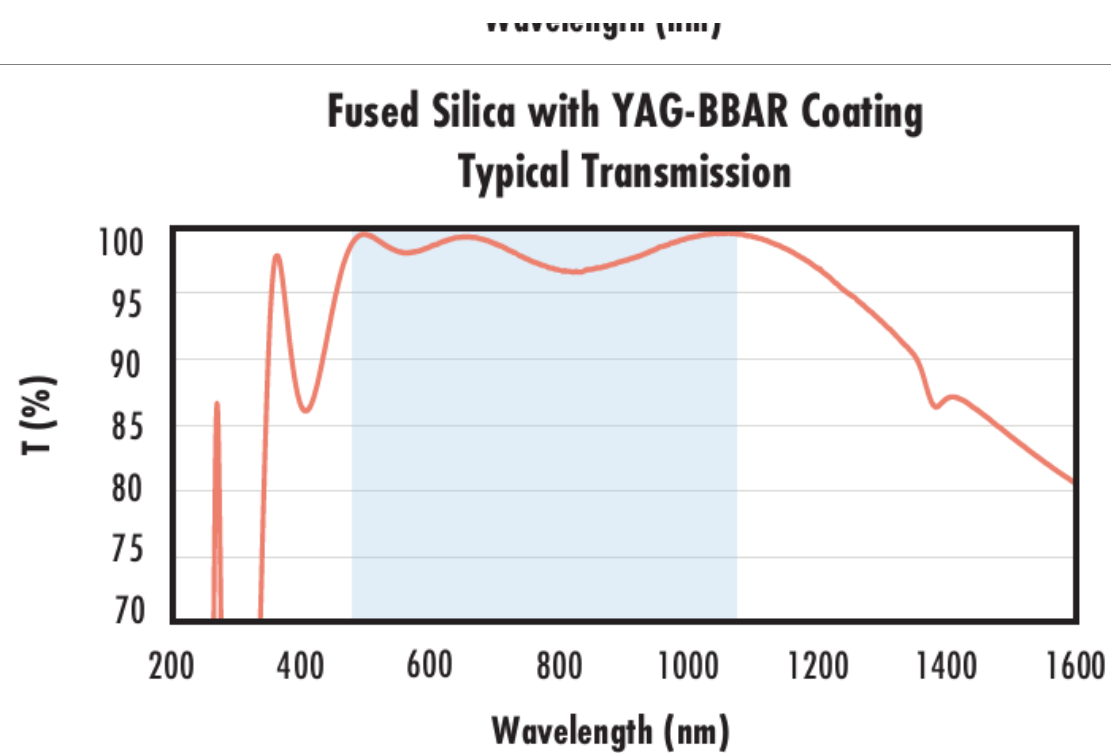
TECHSPEC® *N*/10 UV Fused Silica Windows feature laser-grade surface quality and parallelism. In addition, these windows will limit the transmitted wavefront distortion to *N*/10. The superior transmission characteristics, excellent thermal properties, and high tolerance manufacturing specifications make these windows an excellent choice for more demanding applications. TECHSPEC *N*/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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div>Uncoated Fused Silica<br/>Typical Transmission</div><div><div><div>T (%)</div><div><div><div></div></div></div><div><div>100</div><div>95</div><div>90</div><div>85</div><div>80</div><div>75</div><div>70</div></div></div><div><div>200</div><div>400</div><div>600</div><div>800</div><div>1000</div><div>1200</div><div>1400</div><div>1600</div><div>1800</div><div>2000</div><div>2200</div></div><div>Wavelength (nm)</div></div></div> <div><div>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</div><div><a href="#">Click Here to Download Data</a></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| <div><div>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</div><div><div><div>T (%)</div><div><div><div></div></div></div><div><div>100</div><div>95</div><div>90</div><div>85</div><div>80</div><div>75</div><div>70</div></div></div><div><div>200</div><div>400</div><div>600</div><div>800</div><div>1000</div><div>1200</div><div>1400</div><div>1600</div><div>1800</div><div>2000</div><div>2200</div></div><div>Wavelength (nm)</div></div></div> <div><div>Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><div><div><div><div></div></div><div><div>R<sub>avg</sub> ≤ 1.75% @ 400 - 700nm (N-BK7)</div></div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div></div>                                                                                         |  |
| <div><div>Fused Silica with UV-AR Coating<br/>Typical Transmission</div><div><div><div>T (%)</div><div><div><div></div></div></div><div><div>100</div><div>95</div><div>90</div><div>85</div><div>80</div><div>75</div><div>70</div></div></div><div><div>200</div><div>400</div><div>600</div><div>800</div><div>1000</div><div>1200</div><div>1400</div><div>1600</div><div>1800</div><div>2000</div><div>2200</div></div><div>Wavelength (nm)</div></div></div> <div><div>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><div><div><div><div></div></div><div><div>R<sub>abs</sub> ≤ 1.0% @ 250 - 425nm</div></div></div><div><div>R<sub>avg</sub> ≤ 0.75% @ 250 - 425nm</div></div><div><div>R<sub>avg</sub> ≤ 0.5% @ 370 - 420nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div></div> |  |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p data-bbox="573 255 1083 359"><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1329 418 1850 468">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 480 1850 531">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 543 1703 593"><math>R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}</math><math>R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}</math></div> <p data-bbox="1329 629 1850 679">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 691 1703 712"><a href="#">Click Here to Download Data</a></p>                                                                        |
| <p data-bbox="573 937 1083 1041"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 1121 1850 1172">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1184 1850 1234">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1246 1703 1267"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1279 1850 1329">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1341 1703 1362"><a href="#">Click Here to Download Data</a></p>                                                                                                                          |
| <p data-bbox="573 1620 1083 1724"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1760 1850 1810">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1329 1822 1850 1872">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1884 1703 1955"><math>R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}</math><math>R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}</math><math>R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}</math></div> <p data-bbox="1329 1991 1850 2041">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2053 1703 2074"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="573 2294 1083 2398"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 2463 1850 2513">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1329 2525 1850 2576">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2588 1703 2608"><math>R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}</math></div> <p data-bbox="1329 2620 1850 2671">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2683 1703 2703"><a href="#">Click Here to Download Data</a></p>                                                                                                                           |



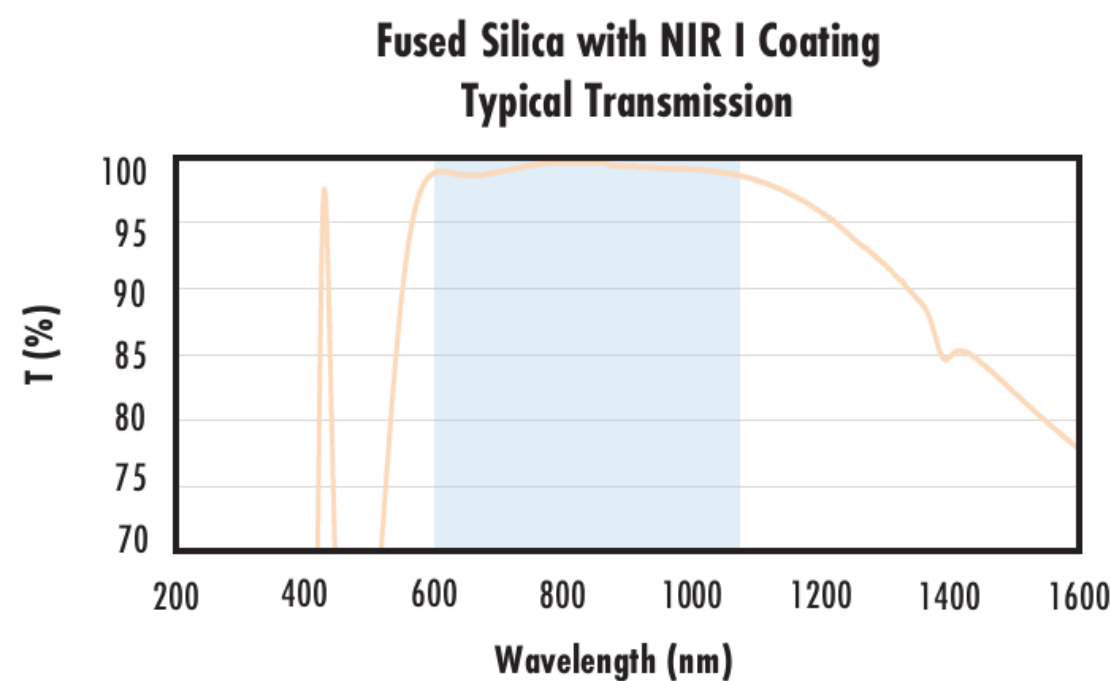
Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.

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.

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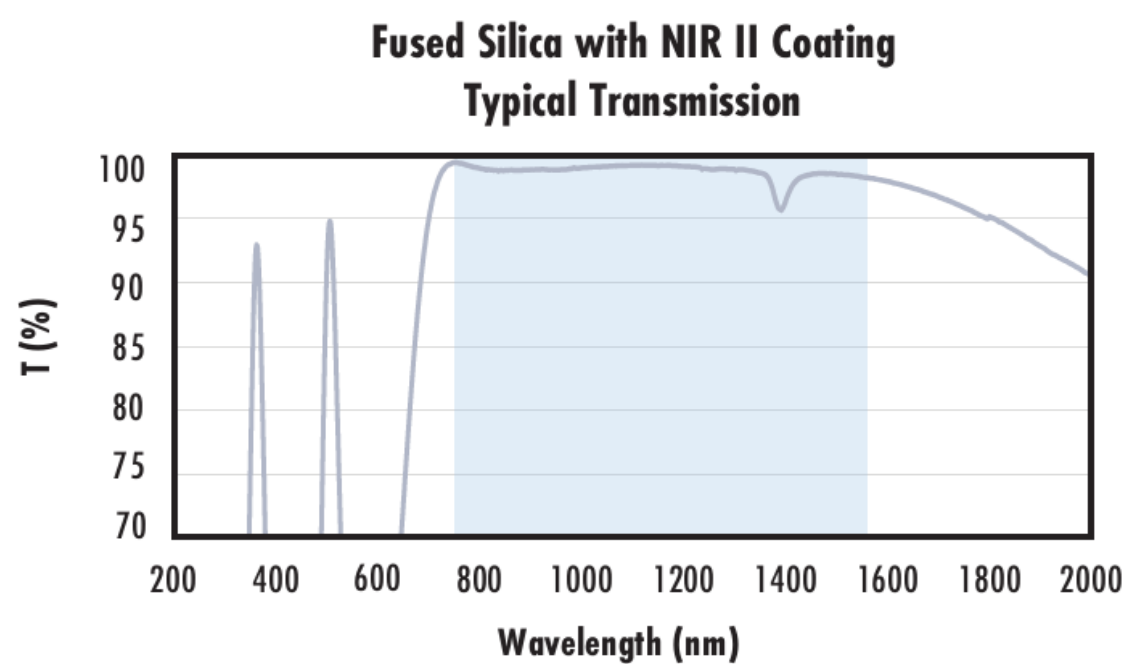
Typical transmission of a 3mm thick fused silica window with NIR  
I (600 - 1050nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

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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](#)