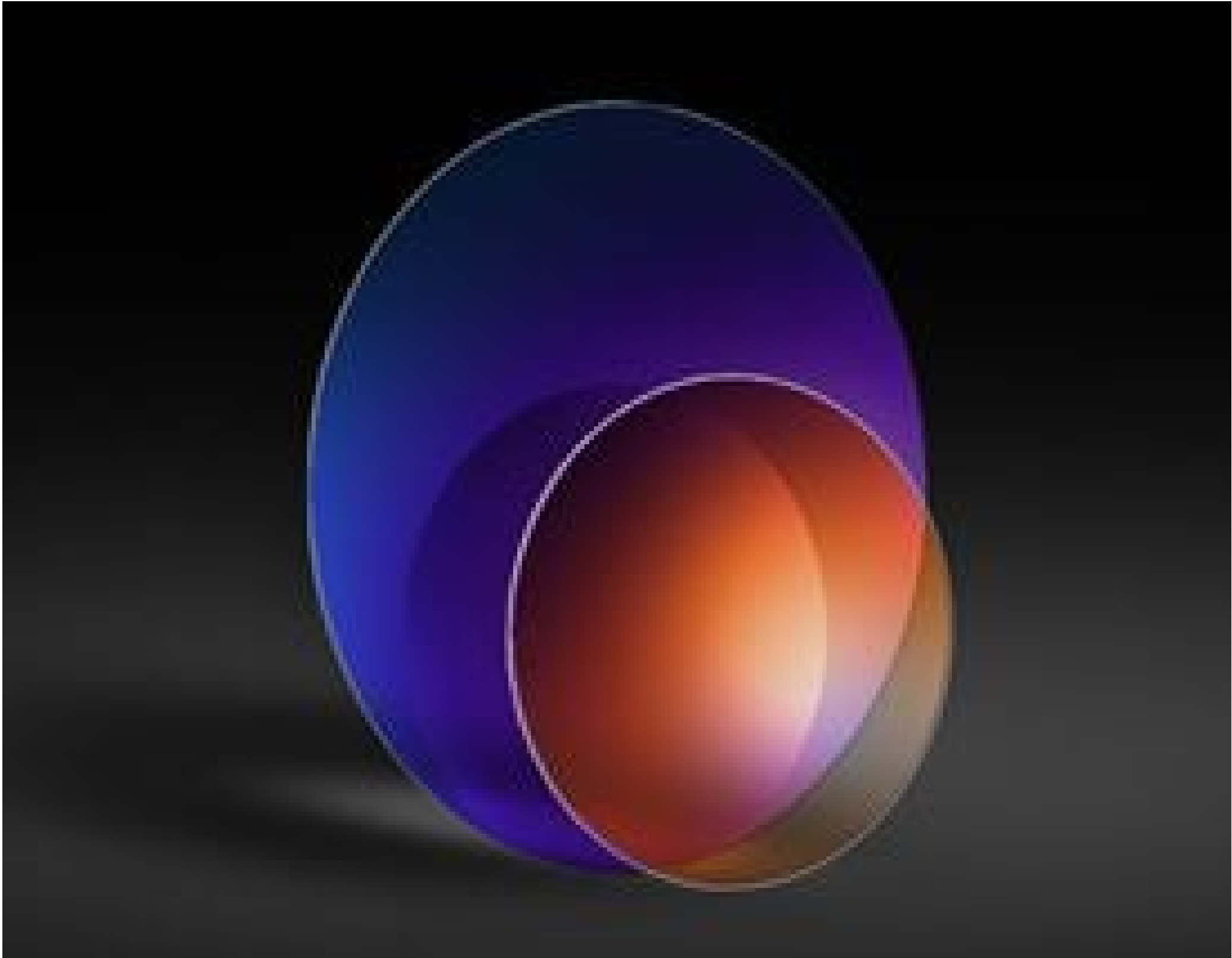


TECHSPEC® 20mm Diameter VIS-NIR Coated, Ultra Thin Fused Silica Window



Stock #24-244 16 In Stock

-

1

+

€197<sup>.00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €197,00 each                  |
| Qty 6-25       | €157,00 each                  |
| Qty 26-49      | €147,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

!

 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):

17.00

Diameter (mm):

20.00 +0.00/-0.10

|                      |                          |
|----------------------|--------------------------|
| 0.20 ±0.025          | Thickness (mm):          |
| Protective as needed | Bevel:                   |
| Fine Ground          | Edges:                   |
| <1                   | Parallelism (arcsec):    |
| 0.16                 | Poisson's Ratio:         |
| 73                   | Young's Modulus (GPa):   |
| 522.00               | Knoop Hardness (kg/mm²): |

Optical Properties

|                                                                                                                    |                                        |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| VIS-NIR (400-1000nm)                                                                                               | Coating:                               |
| <a href="#">Fused Silica</a> (Corning 7980)                                                                        | Substrate: <input type="checkbox"/>    |
| 1.458                                                                                                              | Index of Refraction (n <sub>d</sub> ): |
| 60-40                                                                                                              | Surface Quality:                       |
| λ/2                                                                                                                | Transmitted Wavefront, P-V:            |
| 64.17                                                                                                              | Abbe Number (v <sub>d</sub> ):         |
| R <sub>abs</sub> ≤0.25% @ 880nm<br>R <sub>avg</sub> ≤1.25% @ 400 - 870nm<br>R <sub>avg</sub> ≤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)<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

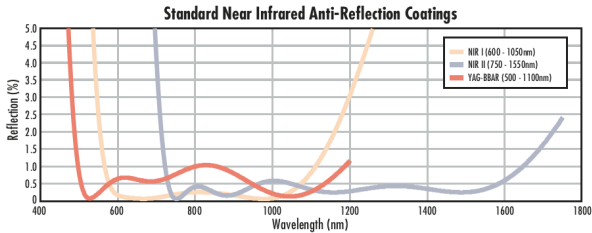
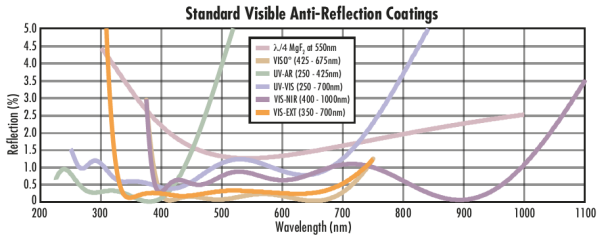
|                           |                             |
|---------------------------|-----------------------------|
| <a href="#">Compliant</a> | RoHS 2015:                  |
| <a href="#">View</a>      | Certificate of Conformance: |
| <a href="#">Compliant</a> | Reach 235:                  |

## Product Details

- Ultra-Thin 0.20mm Thickness
- UV Fused Silica Substrates
- Extremely Lightweight

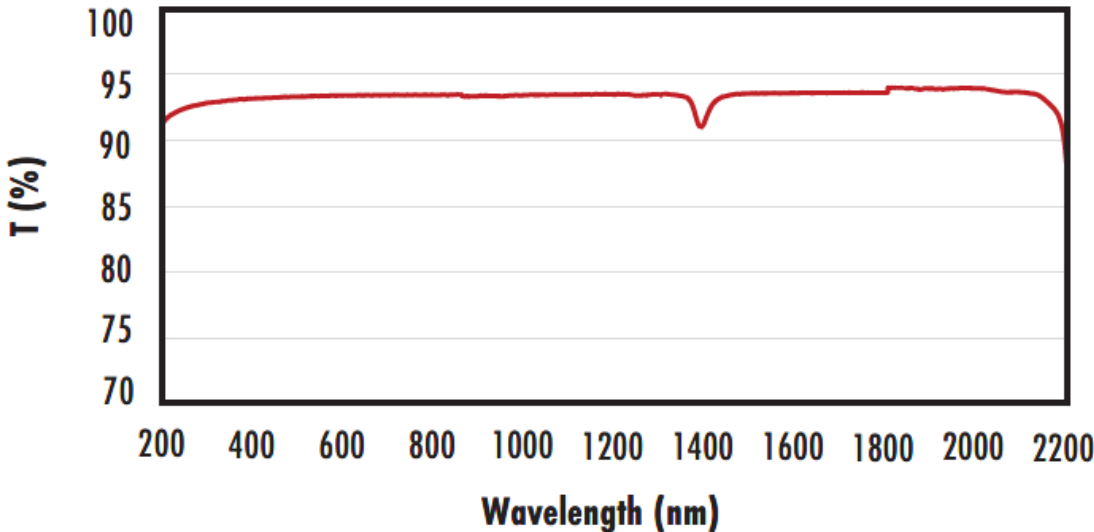
TECHSPEC® Ultra-Thin Fused Silica Windows provide the benefits of fused silica including low thermal expansion, excellent chemical resistance, and UV transmission with a thickness less than 1/5th of our standard fused silica windows. Unlike traditional cover glass, these windows have polished surfaces to provide consistent transmitted wavefront distortion, making them advantageous for OEM applications. Their extremely thin designs make them ideal for both weight and size sensitive applications, especially those requiring broadband transmission from the UV to the NIR. TECHSPEC Ultra-Thin Fused Silica Windows are ideal for handheld medical devices, wearable technology, and portable UV lights.

## Technical Information



FUSED SILICA

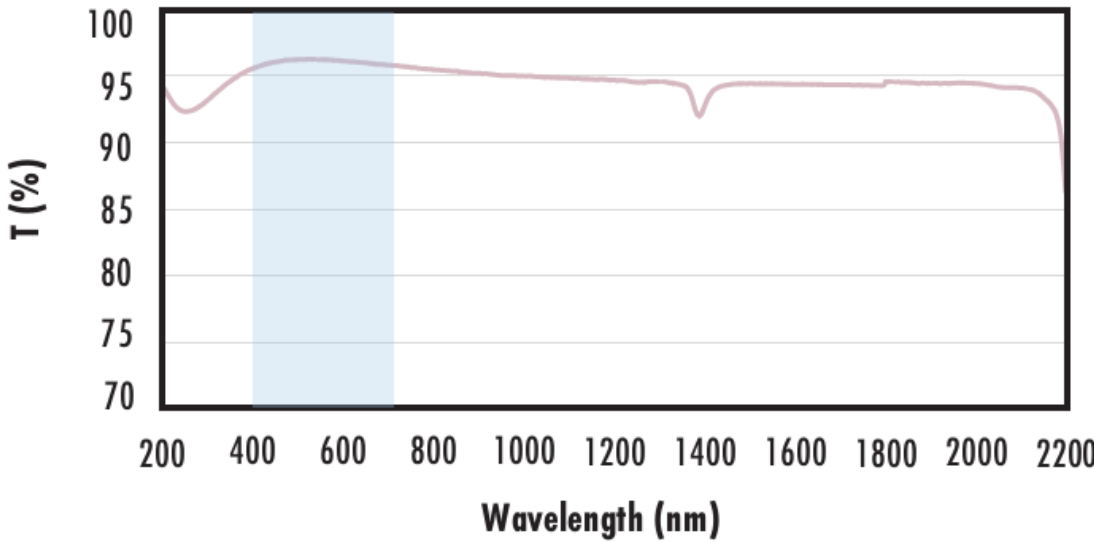
Uncoated Fused Silica  
Typical Transmission



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

[Click Here to Download Data](#)

Fused Silica with MgF<sub>2</sub> Coating  
Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

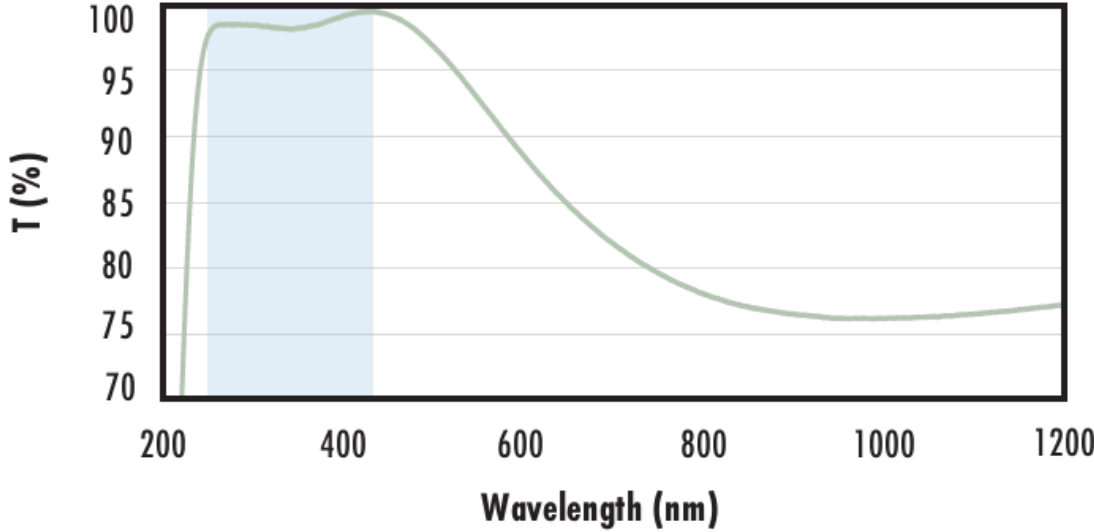
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}$$

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



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:

$$R_{abs} \leq 1.0\% \text{ @ } 250 - 425\text{nm}$$

$$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$$

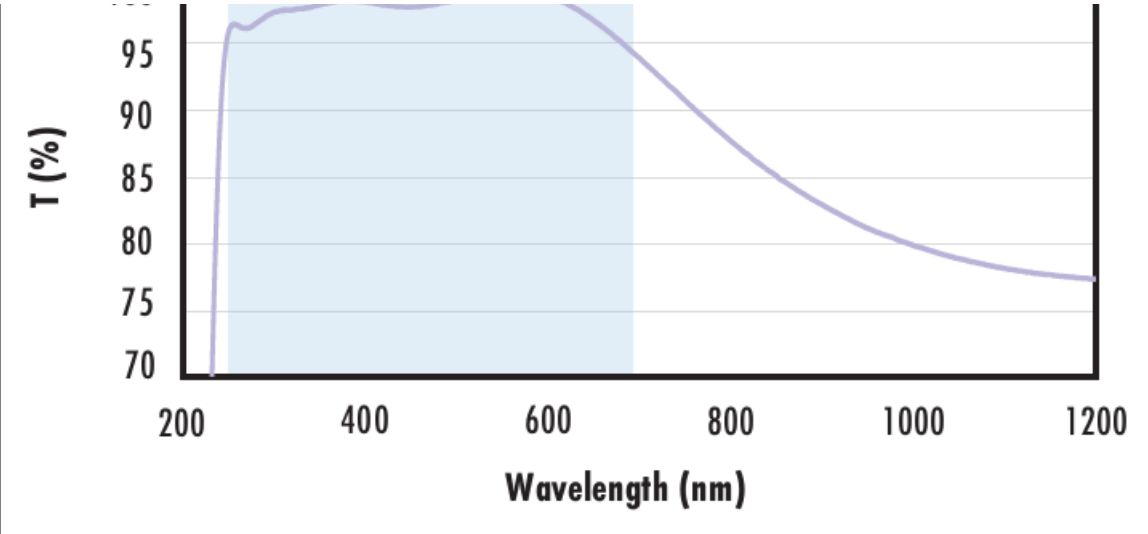
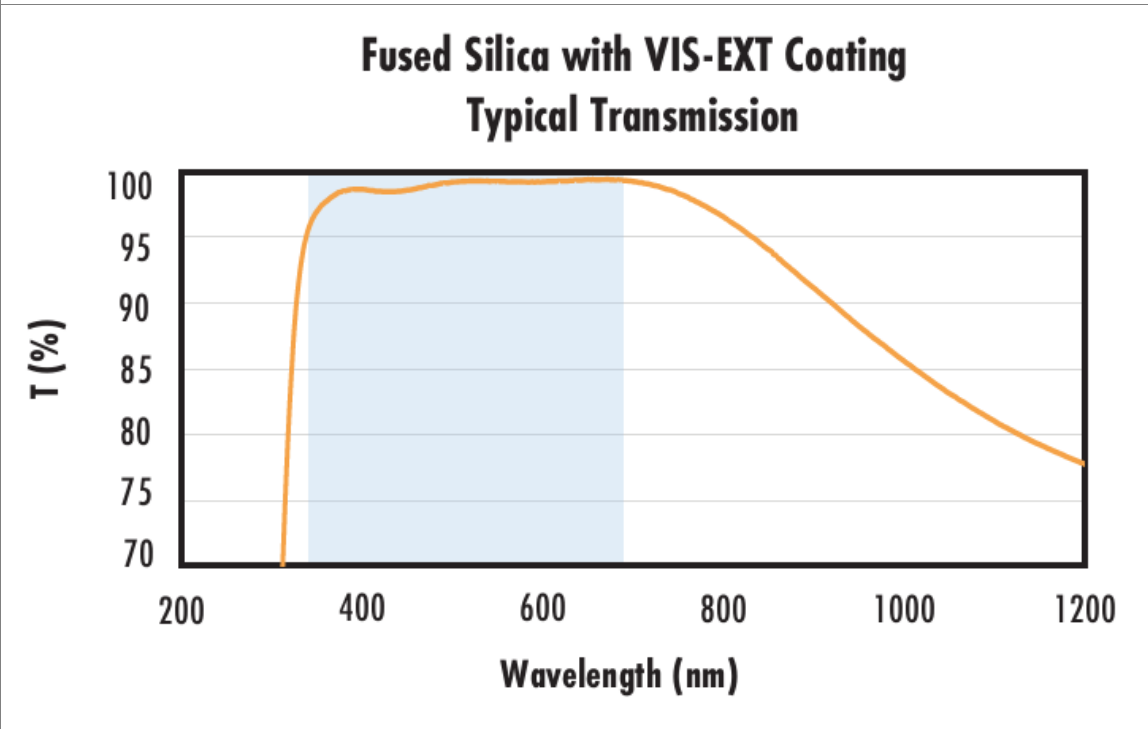
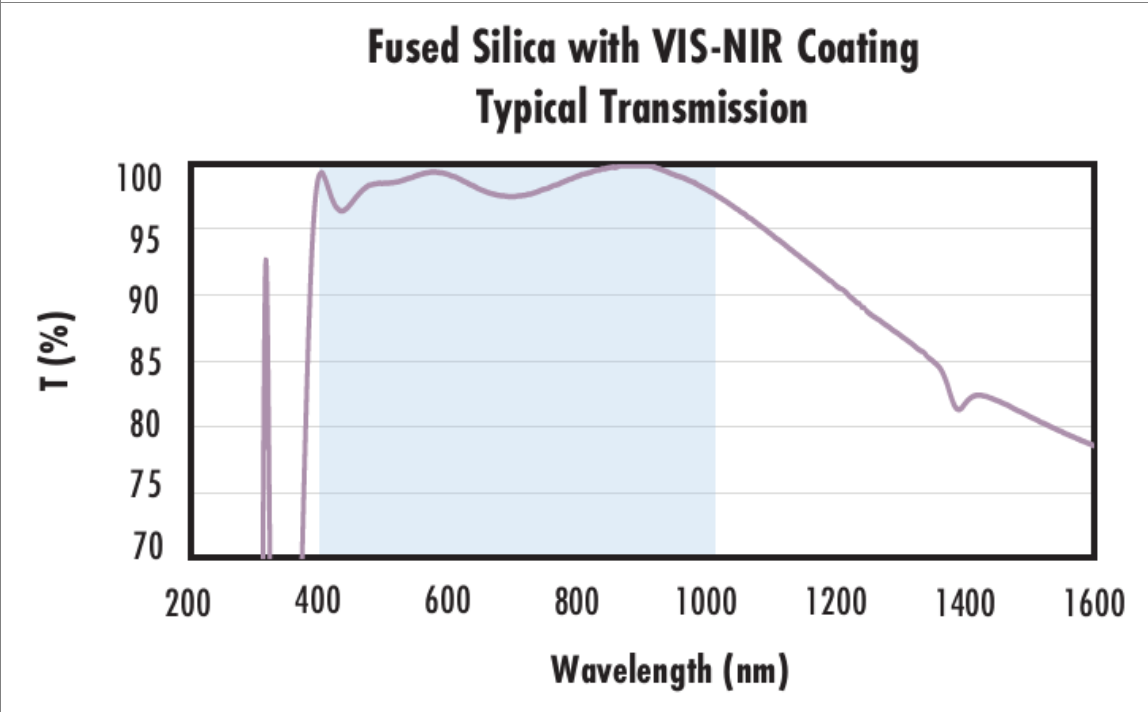
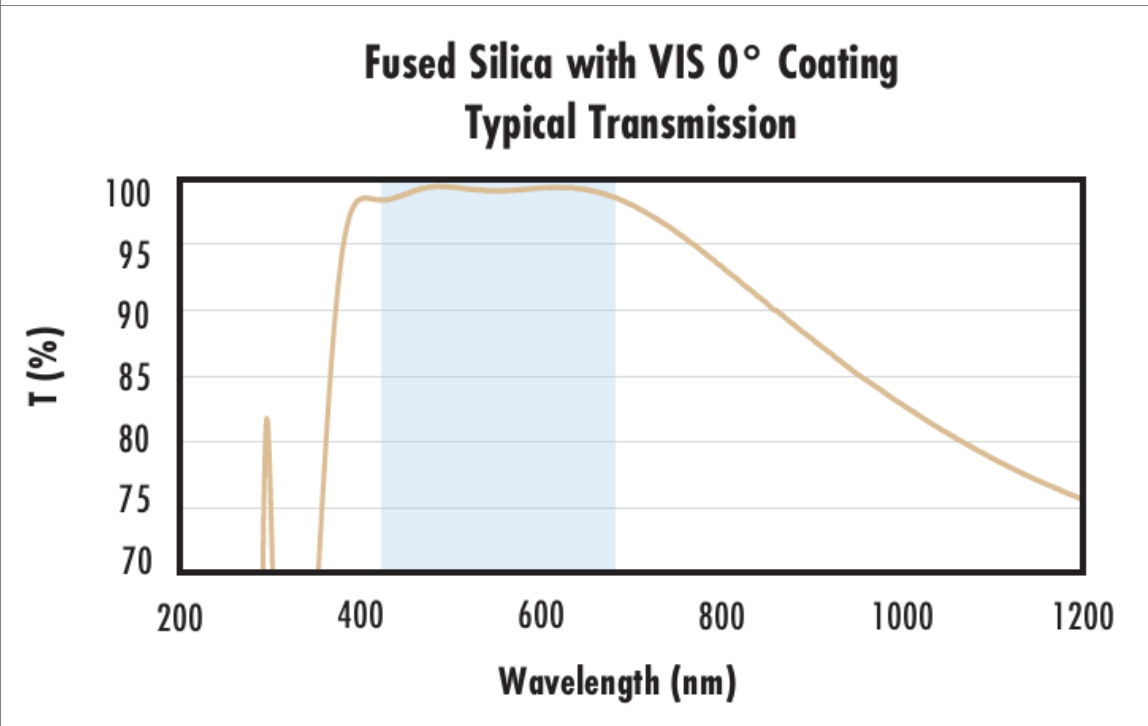
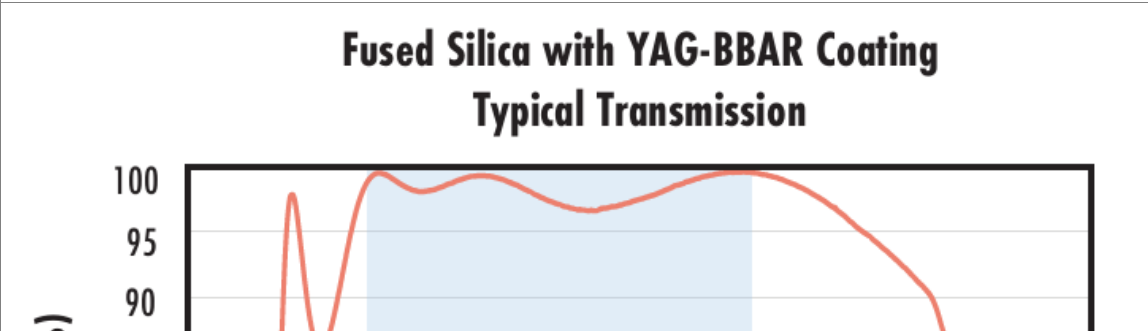
$$R_{avg} \leq 0.5\% \text{ @ } 370 - 420\text{nm}$$

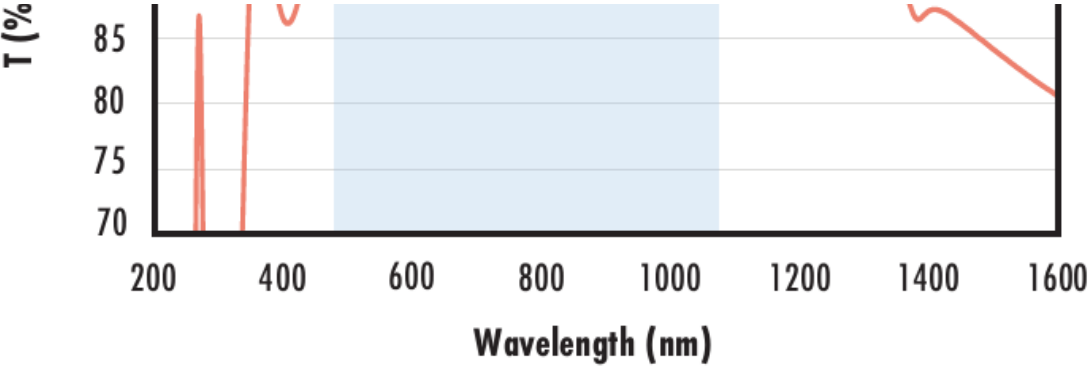
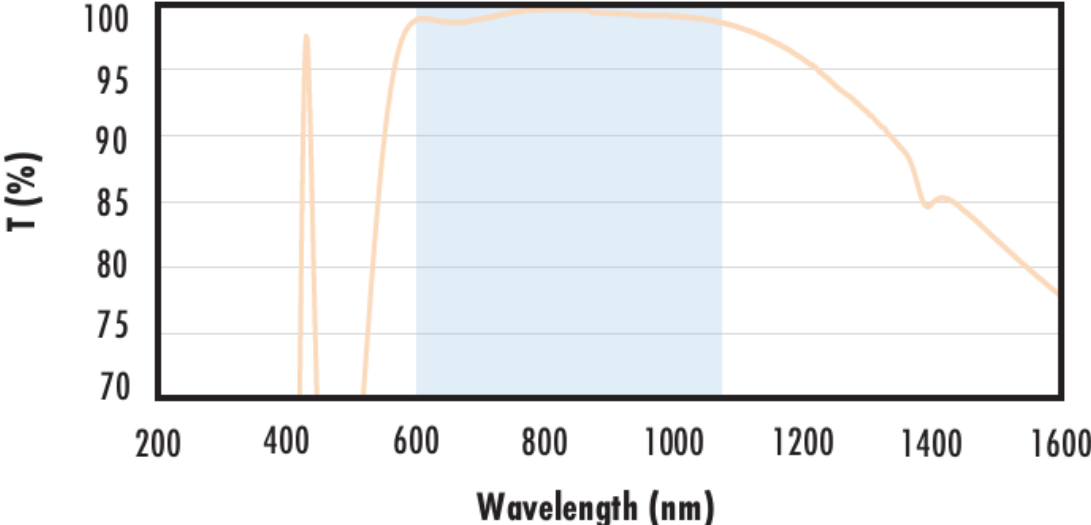
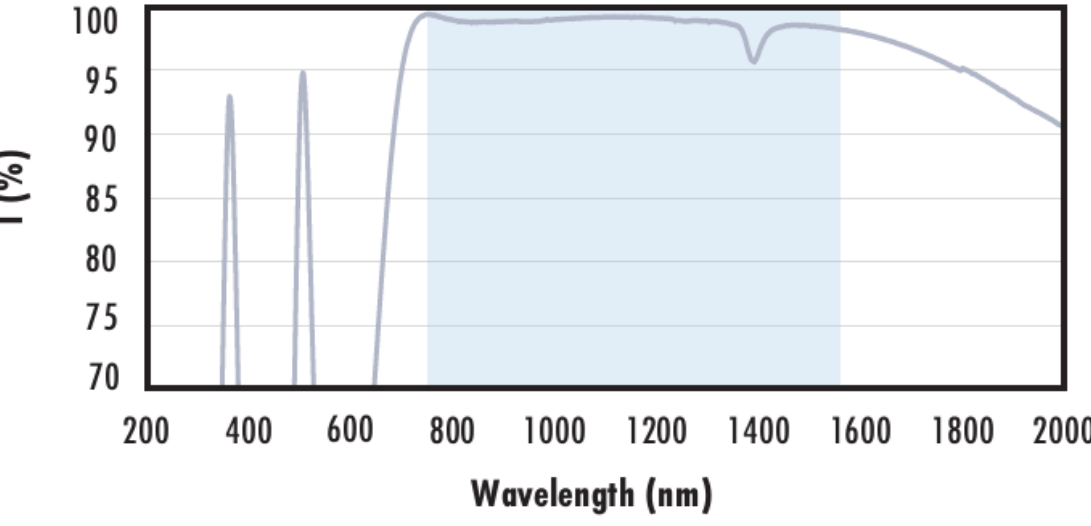
Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

Fused Silica with UV-VIS Coating  
Typical Transmission



|                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                      | <p>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.0\%</math> @ 350 - 450nm<br/><math>R_{avg} \leq 1.5\%</math> @ 250 - 700nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                   |
| <p><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>    | <p>Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\%</math> @ 350 - 700nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                    |
| <p><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>   | <p>Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\%</math> @ 880nm<br/><math>R_{avg} \leq 1.25\%</math> @ 400 - 870nm<br/><math>R_{avg} \leq 1.25\%</math> @ 890 - 1000nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p> |
| <p><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>    | <p>Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\%</math> @ 425 - 675nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                     |
| <p><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <p>Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\%</math> @ 500 - 1100nm</p>                                                                                                                                                                                                                                |

|                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                          | <div><div><math>R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}</math><math>R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}</math><math>R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}</math></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>Fused Silica with NIR I Coating</div><div>Typical Transmission</div></div>   | <div><div>Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><math>R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}</math></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>Fused Silica with NIR II Coating</div><div>Typical Transmission</div></div> | <div><div>Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><math>R_{abs} \leq 1.5\% \text{ @ } 750 - 800\text{nm}</math><math>R_{abs} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}</math><math>R_{avg} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}</math></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> |

Coating Curves