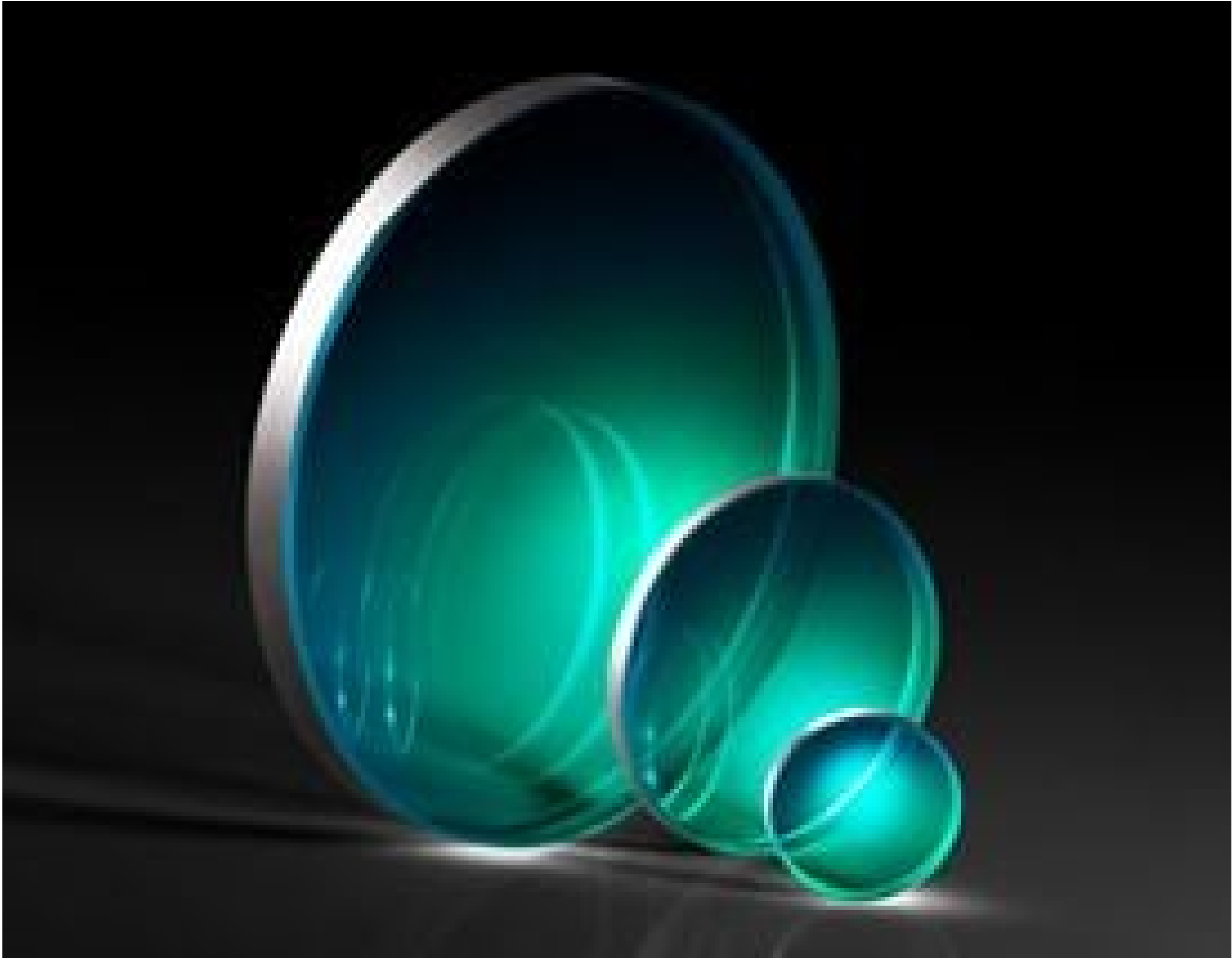


TECHSPEC<sup>®</sup> 12.5mm Dia., 3mm Thick, VIS-NIR Coated,  $\lambda/4$  Fused Silica Window



TECHSPEC<sup>®</sup>  $\lambda/4$  UVFused Silica Windows

Stock **#14-985** **1 In Stock**

-

1

+

€142<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €142,00 each                  |
| Qty 6-25       | €113,00 each                  |
| Qty 26-49      | €106,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

**i** Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Protective Window

Type:

Physical & Mechanical Properties

Protective as needed

Bevel:

Clear Aperture (%):

|                   |                          |
|-------------------|--------------------------|
| 90                |                          |
| 11.25             | Clear Aperture CA (mm):  |
| 12.50 +0.00/-0.10 | Diameter (mm):           |
| 3.00 ±0.10        | Thickness (mm):          |
| Fine Ground       | Edges:                   |
| 522.00            | Knoop Hardness (kg/mm²): |
| <1                | Parallelism (arcmin):    |
| 0.16              | Poisson's Ratio:         |
| 73                | Young's Modulus (GPa):   |

|                                                                                                                    |                                        |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Optical Properties                                                                                                 |                                        |
| 67.8                                                                                                               | Abbe Number (v <sub>d</sub> ):         |
| VIS-NIR (400-1000nm)                                                                                               | Coating:                               |
| 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:                 |
| 1.458                                                                                                              | Index of Refraction (n <sub>d</sub> ): |
| <a href="#">Fused Silica</a> (Corning 7980)                                                                        | Substrate:                             |
| 40-20                                                                                                              | Surface Quality:                       |
| λ/4                                                                                                                | Transmitted Wavefront, P-V:            |
| 400 - 1000                                                                                                         | Wavelength Range (nm):                 |

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| 5 J/cm² @ 532nm, 10ns | Damage Threshold, Reference: <input type="checkbox"/> |
|-----------------------|-------------------------------------------------------|

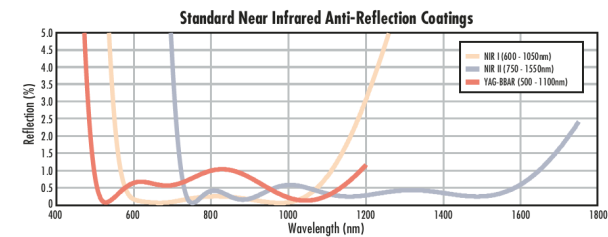
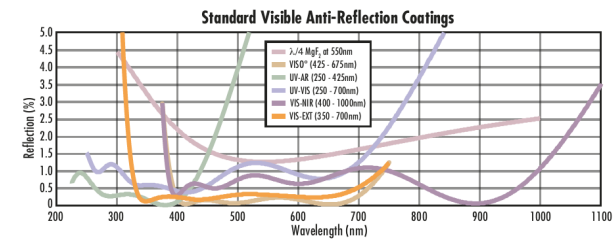
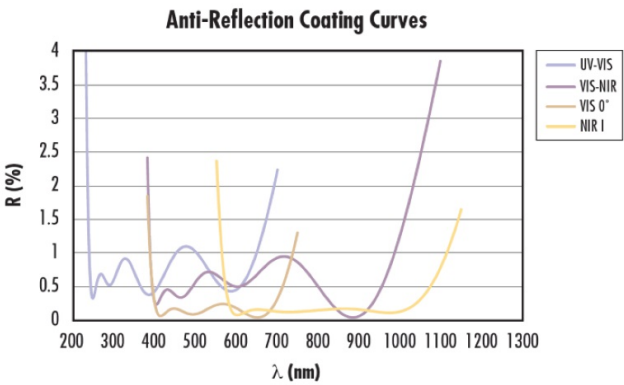
|                                                                   |                                                              |
|-------------------------------------------------------------------|--------------------------------------------------------------|
| Material Properties                                               |                                                              |
| 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): |
| 2.20                                                              | Density (g/cm³):                                             |

|                           |                             |
|---------------------------|-----------------------------|
| Regulatory Compliance     |                             |
| <a href="#">Compliant</a> | RoHS 2015:                  |
| <a href="#">View</a>      | Certificate of Conformance: |
| <a href="#">Compliant</a> | REACH 241:                  |

## Product Details

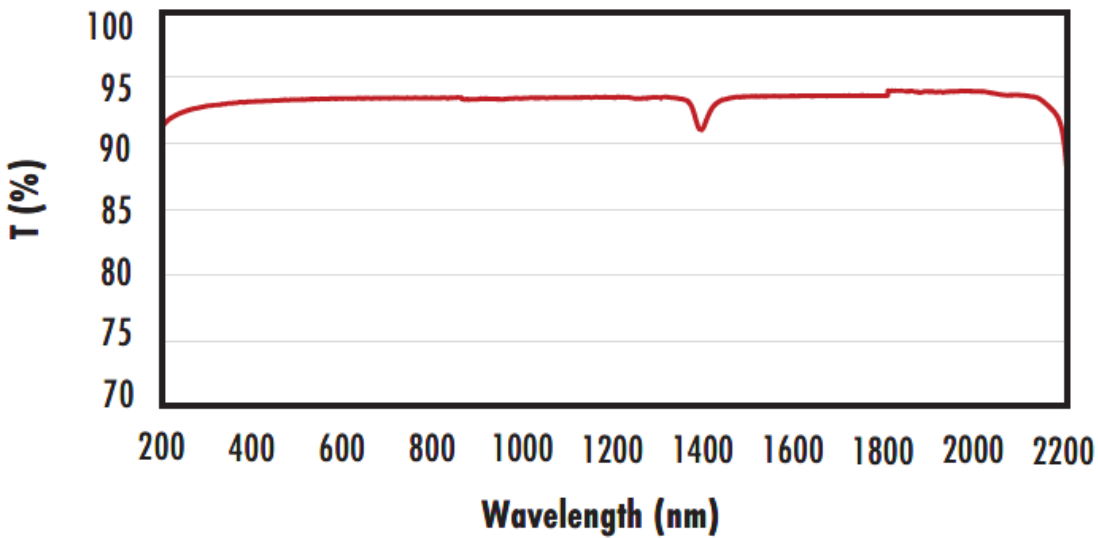
- Available Uncoated or BBAR Coated for UV, Visible, and NIR
  - Ideal for Imaging Applications
  - Circular and Rectangular Sizes from 5 to 200mm
  - [1λ](#) or [λ/10](#) UV Fused Silica Windows Also Available
- TECHSPEC® λ/4 UV Fused Silica Windows are manufactured with 40-20 surface quality and λ/4 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 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

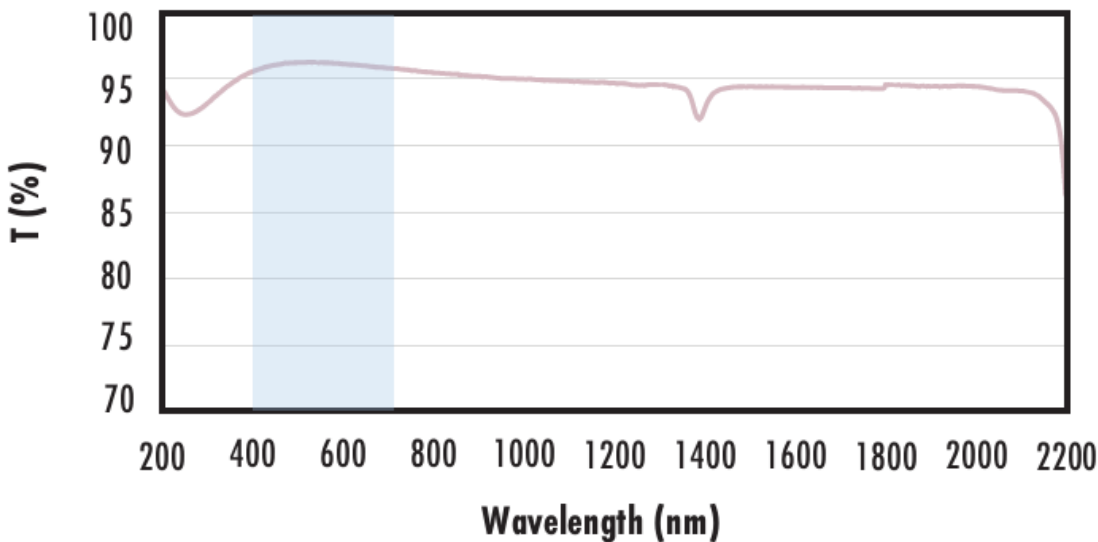
Uncoated Fused Silica  
Typical Transmission



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.

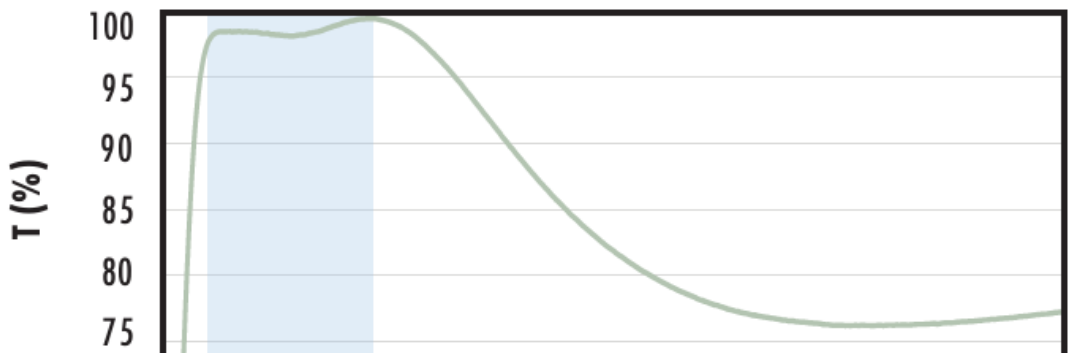
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 1.75\%$  @ 400 - 700nm (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:

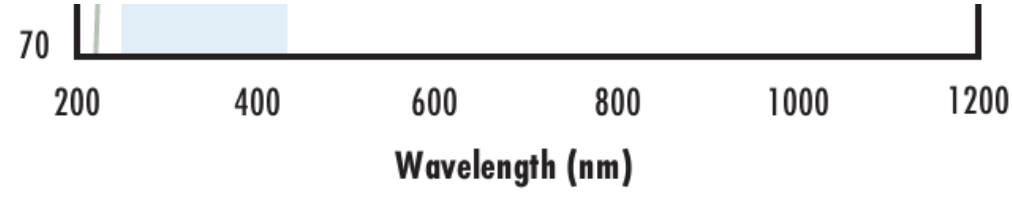
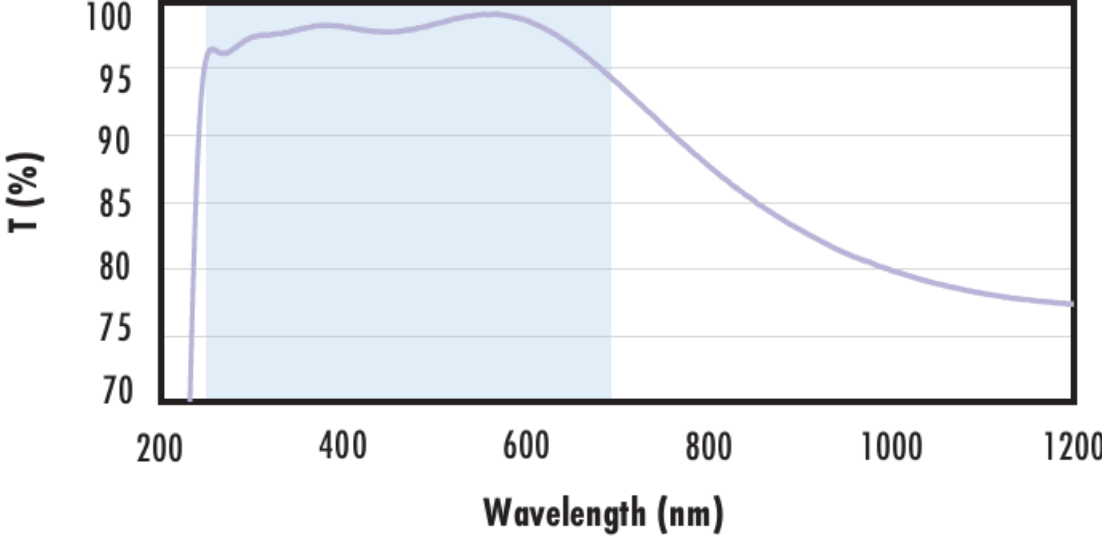
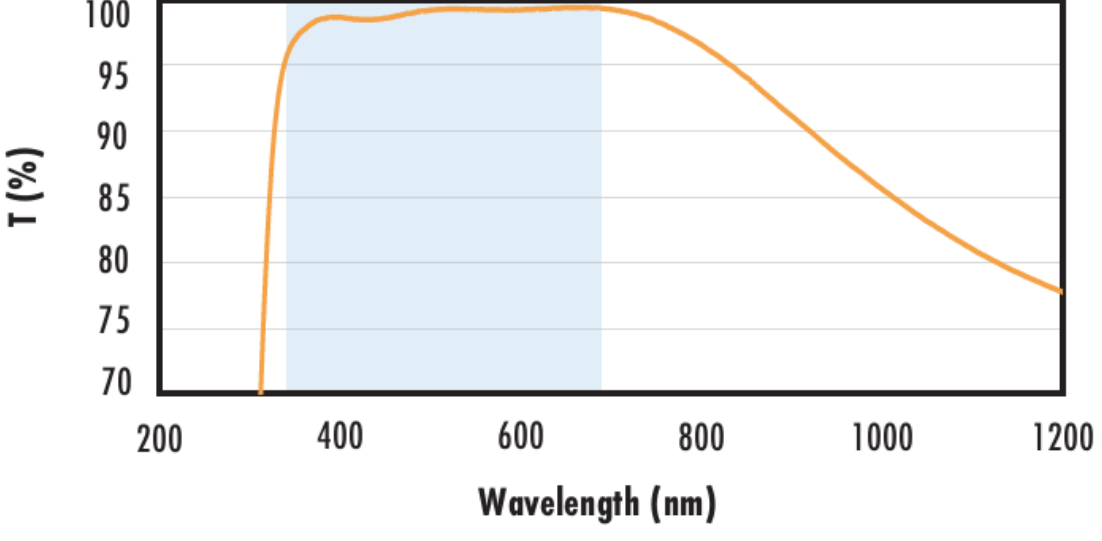
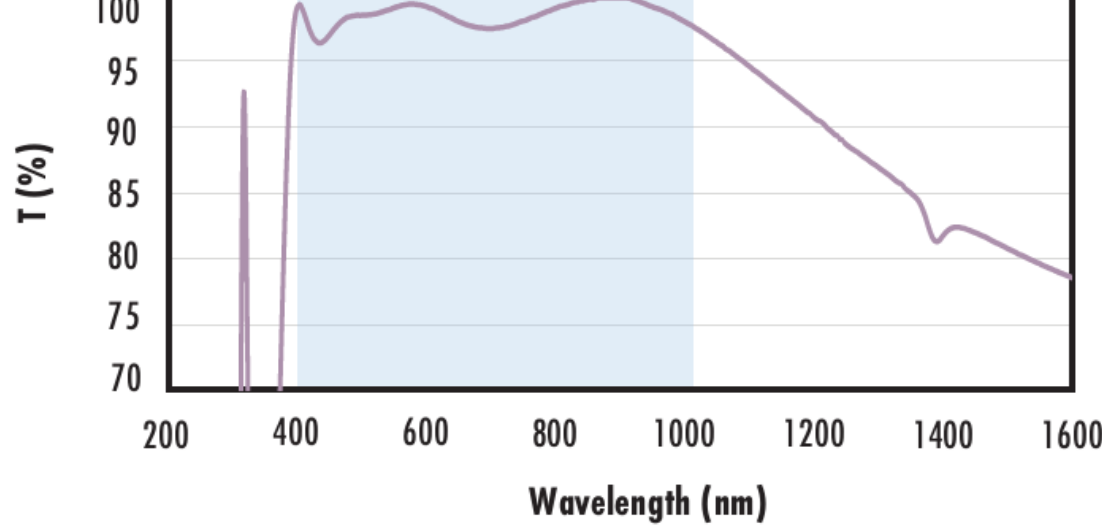
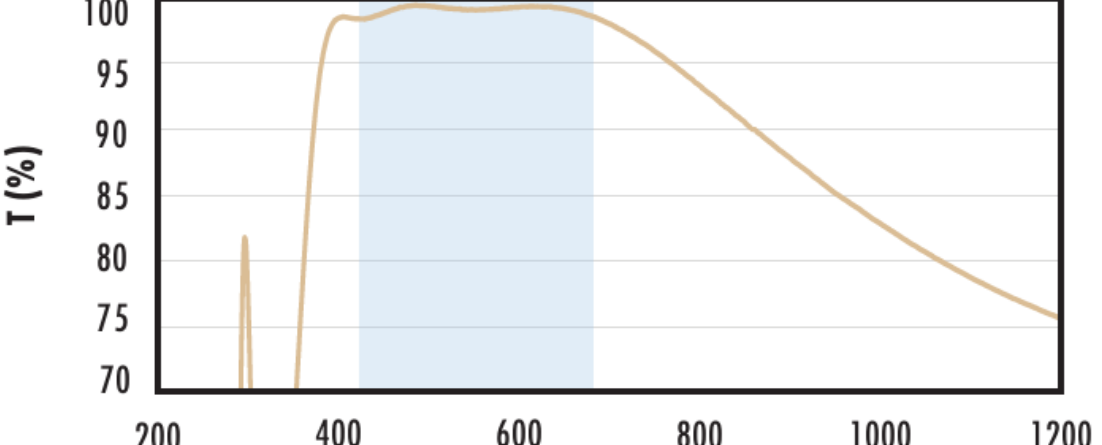
$R_{abs} \leq 1.0\%$  @ 250 - 425nm

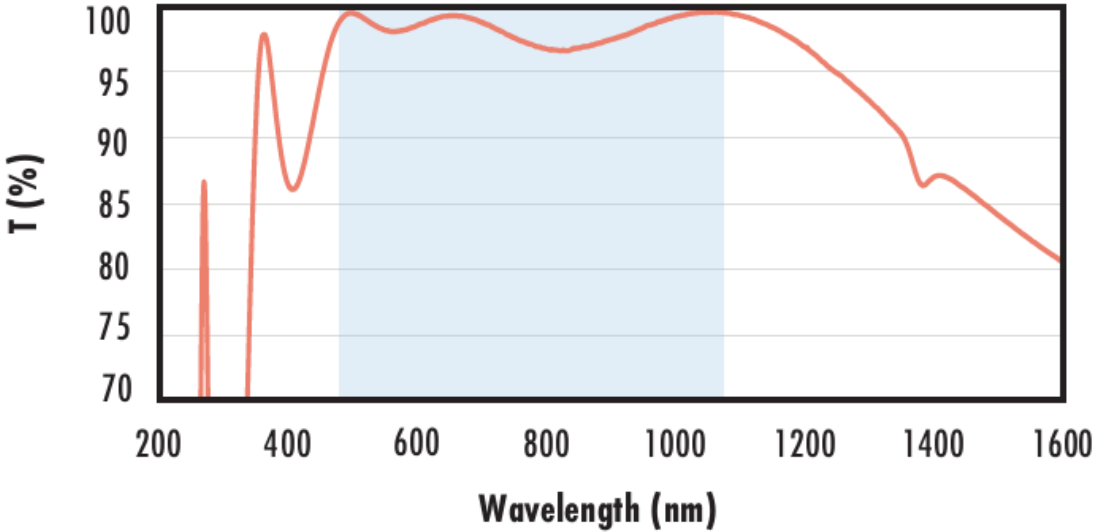
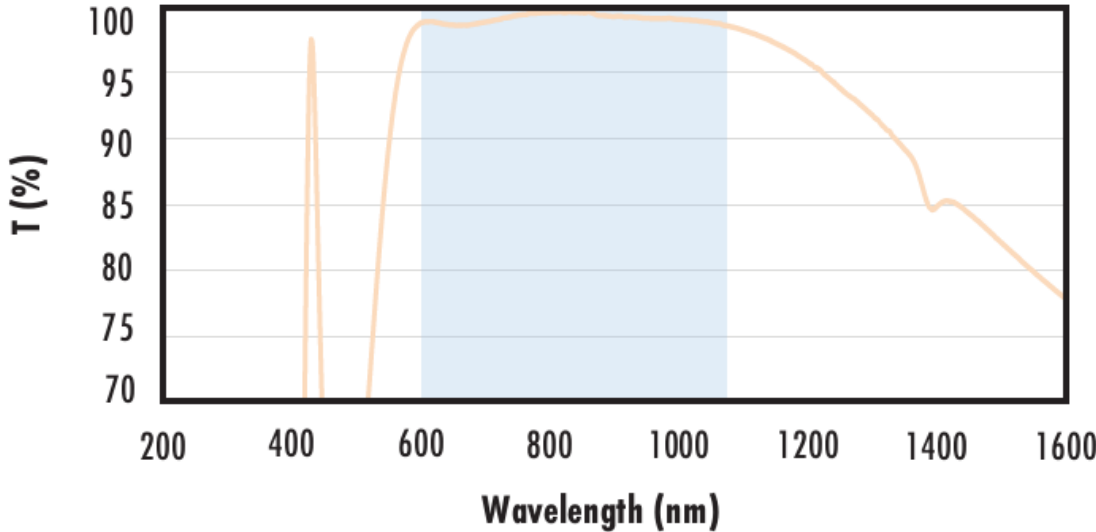
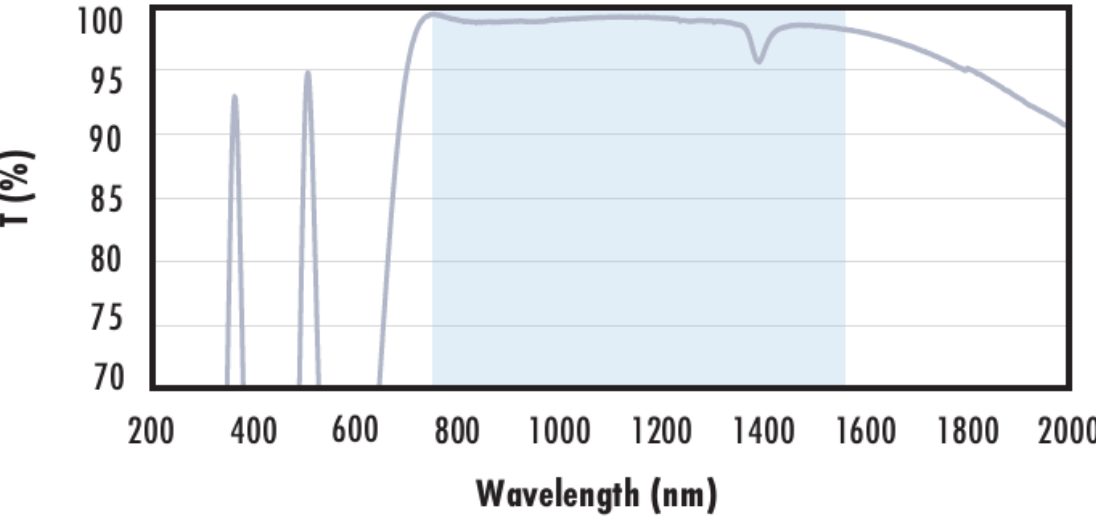
$R_{avg} \leq 0.75\%$  @ 250 - 425nm

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

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

[Click Here to Download Data](#)

|                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p data-bbox="573 296 1083 400"><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1329 460 1856 507">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 525 1856 572">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 587 1709 635"><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 670 1856 718">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 733 1709 750"><a href="#">Click Here to Download Data</a></p>                                                                        |
| <p data-bbox="567 979 1079 1083"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 1163 1856 1210">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1225 1856 1273">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1288 1709 1308"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1323 1856 1371">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1386 1709 1406"><a href="#">Click Here to Download Data</a></p>                                                                                                                          |
| <p data-bbox="573 1656 1083 1760"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1801 1856 1849">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1329 1863 1856 1911">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1465 1926 1719 1997"><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 2033 1856 2080">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2095 1709 2116"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="569 2332 1073 2436"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 2507 1856 2555">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1329 2570 1856 2617">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2632 1709 2653"><math>R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}</math></div> <p data-bbox="1329 2668 1856 2715">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2730 1709 2751"><a href="#">Click Here to Download Data</a></p>                                                                                                                           |

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

Coating Curves

Custom

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](#).

Compatible Mounts

