

[See all 379 Products in Family](#)

TECHSPEC®

50.8mm Dia. 3mm Thick VIS-EXT Coated, 1λ Fused Silica Window



TECHSPEC® 1λ UV Fused Silica Windows

Stock **#25-335** 20+ In Stock

-

1

+

C\$249<sup>20</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | C\$249.20 each                |
| Qty 6-25       | C\$198.80 each                |
| Qty 26-49      | C\$186.20 each                |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

| General                          |                         |
|----------------------------------|-------------------------|
| Protective Window                | Type:                   |
| Physical & Mechanical Properties |                         |
| 45.72                            | Clear Aperture CA (mm): |
| 50.80 +0.00/-0.20                | Diameter (mm):          |

|                      |                          |
|----------------------|--------------------------|
| 3.00 ±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                   |                                        |
| VS-EXT (350-700nm)                   | Coating:                               |
| Fused Silica (Corning 7980)          | Substrate: <input type="checkbox"/>    |
| 1.458                                | Index of Refraction (n <sub>d</sub> ): |
| 60-40                                | Surface Quality:                       |
| 1λ                                   | Transmitted Wavefront, P-V:            |
| 67.8                                 | Abbe Number (v <sub>d</sub> ):         |
| R <sub>avg</sub> ≤0.5% @ 350 - 700nm | Coating Specification:                 |
| 350 - 700                            | Wavelength Range (nm):                 |

|                                                                   |                                                              |
|-------------------------------------------------------------------|--------------------------------------------------------------|
| 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 |                             |
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |
| Compliant             | Reach 235:                  |

## 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
- [λ/4](#) or [λ/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. [λ/4](#) or [λ/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

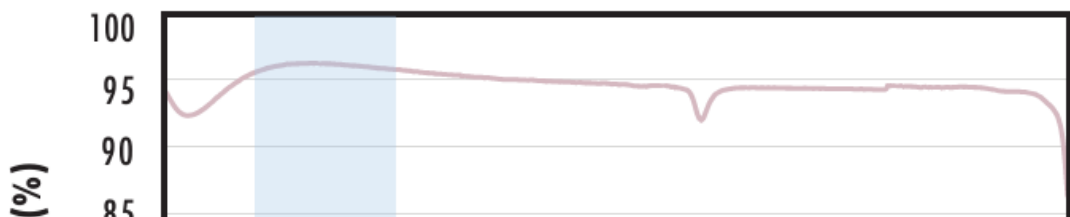
Uncoated Fused Silica  
Typical Transmission



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

[Click Here to Download Data](#)

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

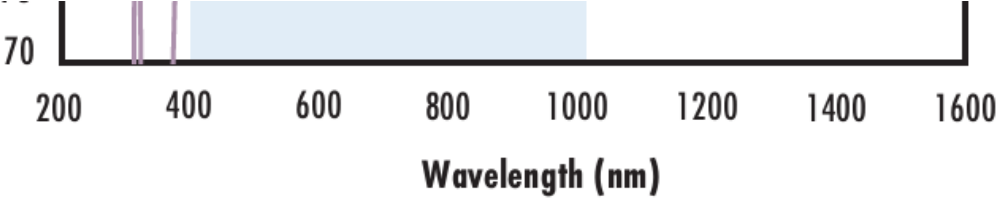
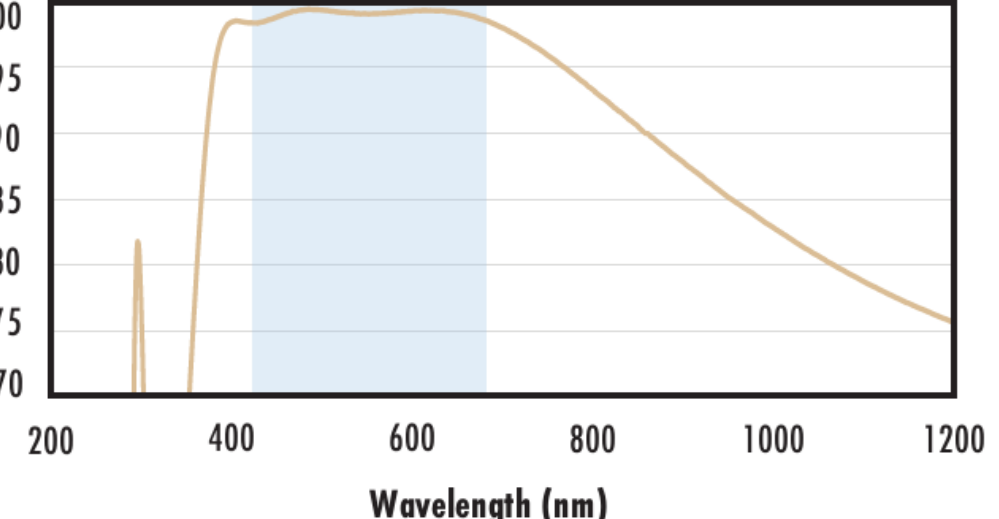
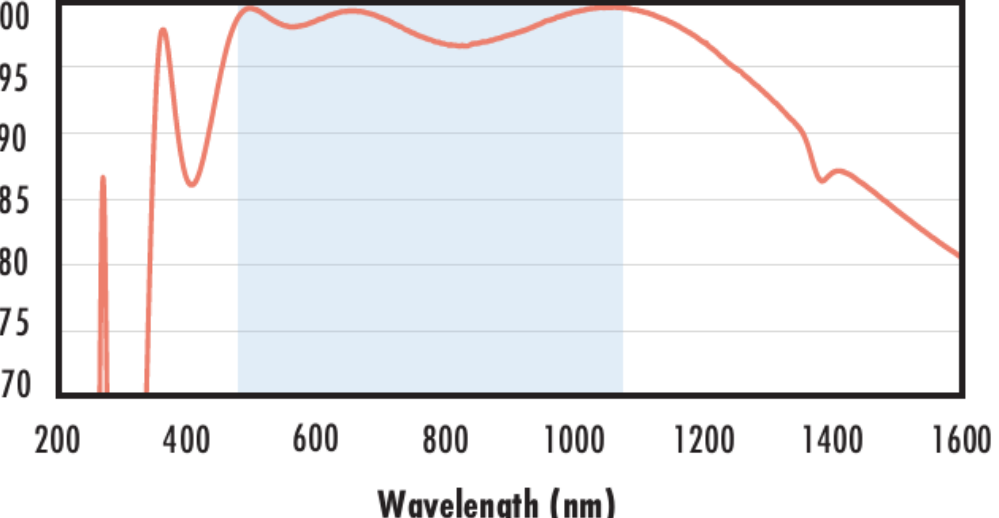
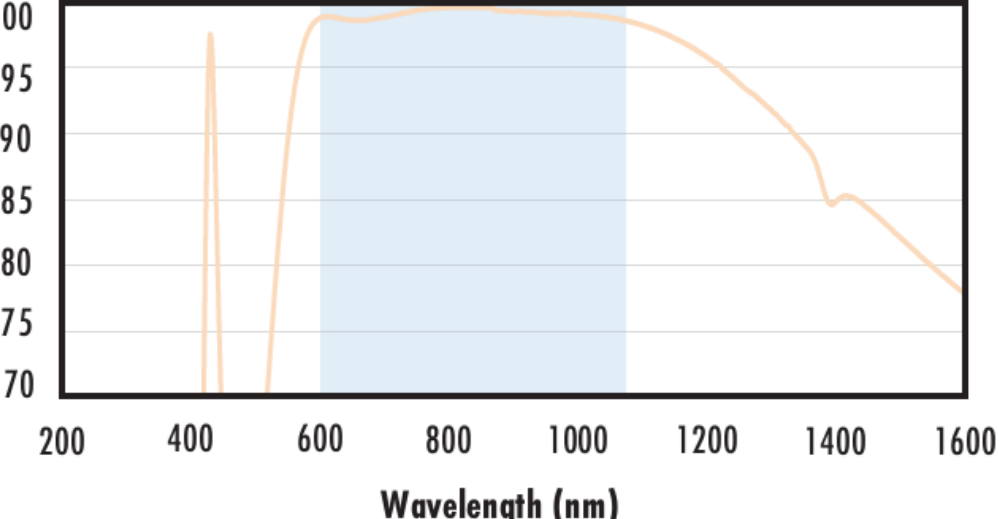
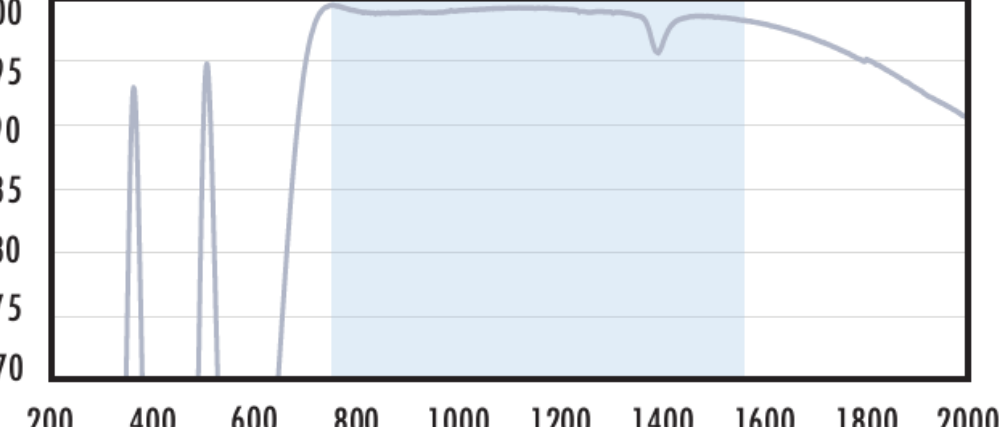


Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

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

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

|                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | <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 UV-AR Coating</b><br/><b>Typical Transmission</b></p>     | <p>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) 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\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.75\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.5\% @ 370 - 420\text{nm}</math></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 UV-VIS Coating</b><br/><b>Typical Transmission</b></p>   | <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\% @ 350 - 450\text{nm}</math><br/><math>R_{avg} \leq 1.5\% @ 250 - 700\text{nm}</math></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\% @ 350 - 700\text{nm}</math></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\% @ 880\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p>                                                    |

|                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                    | <a href="#">Click Here to Download Data</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p data-bbox="569 308 1071 409"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1329 483 1856 531">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1329 546 1856 593">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 608 1707 632"><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p data-bbox="1329 647 1856 694">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 709 1713 733"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                        |
| <p data-bbox="548 973 1108 1074"><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1130 1856 1178">Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1329 1193 1856 1240">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 1255 1707 1279"><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math></p> <p data-bbox="1478 1279 1707 1302"><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math></p> <p data-bbox="1472 1302 1713 1326"><math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p data-bbox="1329 1341 1856 1389">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1403 1713 1427"><a href="#">Click Here to Download Data</a></p>           |
| <p data-bbox="594 1653 1066 1754"><b>Fused Silica with NIR I Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1329 1828 1856 1875">Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p data-bbox="1329 1890 1856 1938">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1472 1952 1713 1976"><math>R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}</math></p> <p data-bbox="1329 1991 1856 2039">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 2053 1713 2077"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                           |
| <p data-bbox="581 2332 1075 2433"><b>Fused Silica with NIR II Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 2466 1856 2513">Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p data-bbox="1329 2528 1856 2576">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1472 2591 1713 2614"><math>R_{abs} \leq 1.5\% @ 750 - 800\text{nm}</math></p> <p data-bbox="1472 2614 1713 2638"><math>R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}</math></p> <p data-bbox="1472 2638 1713 2662"><math>R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}</math></p> <p data-bbox="1329 2703 1856 2751">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 2766 1713 2789"><a href="#">Click Here to Download Data</a></p> |

Wavelength (nm)

;