

TECHSPEC<sup>®</sup> 10mm Dia., 2mm Thick, UV-AR Coated,  $\lambda$ /4 Fused Silica Window



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

Stock **#25-635** **1 In Stock**

-

1

+

A\$220<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | A\$220.80 each                |
| Qty 6-25       | A\$176.00 each                |
| Qty 26-49      | A\$164.80 each                |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

| General                          |                     |
|----------------------------------|---------------------|
| Protective Window                | Type:               |
| Physical & Mechanical Properties |                     |
| Protective as needed             | Bevel:              |
| 90                               | Clear Aperture (%): |

|                   |                          |
|-------------------|--------------------------|
| 9.00              | Clear Aperture CA (mm):  |
| 10.00 +0.00/-0.10 | Diameter (mm):           |
| 2.00 ±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> ):         |
| UV-AR (250-425nm)                                                                                                                               | Coating:                               |
| Coating Specification:<br>R <sub>abs</sub> ≤1.0% @ 250 - 425nm<br>R <sub>avg</sub> ≤0.75% @ 250 - 425nm<br>R <sub>avg</sub> ≤0.5% @ 370 - 420nm |                                        |
| 1.458                                                                                                                                           | Index of Refraction (n <sub>d</sub> ): |
| Fused Silica (Corning 7980)                                                                                                                     | Substrate:                             |
| 40-20                                                                                                                                           | Surface Quality:                       |
| λ/4                                                                                                                                             | Transmitted Wavefront, P-V:            |
| 250 - 450                                                                                                                                       | Wavelength Range (nm):                 |
| Damage Threshold, Reference: <input type="checkbox"/><br>3 J/cm² @ 355nm, 10ns                                                                  |                                        |

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

| Regulatory Compliance |                             |
|-----------------------|-----------------------------|
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |
| Compliant             | 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                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>Uncoated Fused Silica<br/>Typical Transmission</div><div></div></div>                     | <p>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                                                                                                                                                                                              |
| <div><div>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</div><div></div></div> | <p>Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) 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 1.75\% @ 400 - 700\text{nm (N-BK7)}</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>                                                                                                 |
| <div><div>Fused Silica with UV-AR Coating<br/>Typical Transmission</div><div></div></div>           | <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 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 1848 510">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 525 1848 572">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 587 1705 638"><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 1848 718">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 733 1705 753"><a href="#">Click Here to Download Data</a></p>                                                                        |
| <p data-bbox="567 979 1087 1083"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 1163 1848 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 1848 1273">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1288 1705 1311"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1326 1848 1374">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1389 1705 1409"><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 1848 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 1848 1911">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1465 1926 1715 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 1848 2080">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2095 1705 2116"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="567 2329 1087 2433"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 2507 1848 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 1848 2617">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2632 1705 2656"><math>R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}</math></div> <p data-bbox="1329 2671 1848 2718">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2733 1705 2754"><a href="#">Click Here to Download Data</a></p>                                                                                                                           |

