

TECHSPEC<sup>®</sup> 40mm Dia., 4mm Thick, VIS 0° Coated,  $\lambda$ /4 Fused Silica Window



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

Stock #18-330 15 In Stock

-

1

+

€212<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €212,00 each                  |
| Qty 6-25       | €168,00 each                  |
| Qty 26-49      | €158,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

Prices shown are exclusive of VAT/local taxes

Product Downloads

|       |           |
|-------|-----------|
| 75.00 | #Sorting: |
|-------|-----------|

General

|                   |       |
|-------------------|-------|
| Protective Window | Type: |
|-------------------|-------|

Physical & Mechanical Properties

|                         |
|-------------------------|
| Clear Aperture CA (mm): |
|-------------------------|

|                      |                          |
|----------------------|--------------------------|
| 36.00                |                          |
|                      | Diameter (mm):           |
| 40.00 +0.00/-0.10    |                          |
|                      | Thickness (mm):          |
| 4.00 ±0.10           |                          |
|                      | Parallelism (arcmin):    |
| <1                   |                          |
|                      | Bevel:                   |
| Protective as needed |                          |
|                      | Clear Aperture (%):      |
| 90                   |                          |
|                      | Edges:                   |
| Fine Ground          |                          |
|                      | Poisson's Ratio:         |
| 0.16                 |                          |
|                      | Young's Modulus (GPa):   |
| 73                   |                          |
|                      | Knoop Hardness (kg/mm²): |
| 522.00               |                          |

Optical Properties

|                                             |                                        |
|---------------------------------------------|----------------------------------------|
|                                             | Coating:                               |
| VIS 0° (425-675nm)                          |                                        |
|                                             | Substrate: <div></div>                 |
| <a href="#">Fused Silica</a> (Corning 7980) |                                        |
|                                             | Index of Refraction (n <sub>d</sub> ): |
| 1.458                                       |                                        |
|                                             | Surface Quality:                       |
| 40-20                                       |                                        |
|                                             | Transmitted Wavefront, P-V:            |
| λ/4                                         |                                        |
|                                             | Abbe Number (v <sub>d</sub> ):         |
| 67.8                                        |                                        |
|                                             | Coating Specification:                 |
| R <sub>avg</sub> ≤0.4% @ 425 - 675nm        |                                        |
|                                             | Wavelength Range (nm):                 |
| 425 - 675                                   |                                        |
|                                             | Damage Threshold, Reference:           |
| 5 J/cm² @ 532nm, 10ns                       |                                        |

Material Properties

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
|                       | Density (g/cm³):                                             |
| 2.20                  |                                                              |
|                       | Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C): |
| 0.52 (+5 to +35°C)    |                                                              |
| 0.57 (0 to +200°C)    |                                                              |
| 0.48 (-100 to +200°C) |                                                              |
|                       | Fused Silica Grade:                                          |
| 7980 0G               |                                                              |

Regulatory Compliance

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

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>Uncoated Fused Silica<br/>Typical Transmission</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>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</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\%</math> @ 400 - 700nm (N-BK7)</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>Fused Silica with UV-AR Coating<br/>Typical Transmission</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\%</math> @ 250 - 425nm<br/><math>R_{avg} \leq 0.75\%</math> @ 250 - 425nm<br/><math>R_{avg} \leq 0.5\%</math> @ 370 - 420nm</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 1850 507">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 522 1850 569">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 584 1703 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 1850 718">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 733 1703 750"><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 1850 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 1850 1273">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1288 1703 1308"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1323 1850 1371">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1386 1703 1403"><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 1850 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 1850 1911">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1465 1926 1713 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 1850 2080">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2095 1703 2113"><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 1850 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 1850 2617">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2632 1703 2653"><math>R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}</math></div> <p data-bbox="1329 2668 1850 2715">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2730 1703 2748"><a href="#">Click Here to Download Data</a></p>                                                                                                                           |



