

TECHSPEC<sup>®</sup> 30mm Dia. x 30mm FL, Uncoated, UV Double-Convex Lens



UV Fused Silica Double-Convex (DCX) Lenses



Stock **#22-413** 5 In Stock

☐ [Other Coating Options](#)

-

1

+

C\$233<sup>00</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | C\$233.80 each                |
| Qty 6-25       | C\$187.60 each                |
| Qty 26-49      | C\$175.00 each                |
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General

Type:  
Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

|                                             |                             |
|---------------------------------------------|-----------------------------|
| 30.00 +0.0/-0.025                           |                             |
| Centering (arcmin):                         | <1                          |
| Bevel:                                      | Protective as needed        |
| Center Thickness CT (mm):                   | 13.08 ±0.10                 |
| Edge Thickness ET (mm):                     | 3.21                        |
| Clear Aperture CA (mm):                     | 29.00                       |
| Optical Properties                          |                             |
| Back Focal Length BFL (mm):                 | 25.12                       |
| Effective Focal Length EFL (mm):            | 30.00                       |
| Coating:                                    | Uncoated                    |
| Coating Specification:                      | Uncoated                    |
| Substrate: <input type="checkbox"/>         | Fused Silica (Corning 7980) |
| Surface Quality:                            | 40-20                       |
| Power (P-V) @ 632.8nm:                      | 1.5λ                        |
| Irregularity (P-V) @ 632.8nm:               | λ/4                         |
| Radius R <sub>1</sub> =R <sub>2</sub> (mm): | 25.27                       |
| f/#:                                        | 1.00                        |
| Focal Length Specification Wavelength (nm): | 587.6                       |
| Focal Length Tolerance (%):                 | ±1                          |
| Numerical Aperture NA:                      | 0.50                        |
| Wavelength Range (nm):                      | 200 - 2200                  |

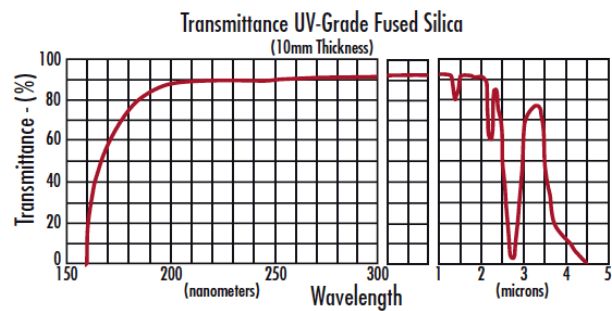
|                             |                      |
|-----------------------------|----------------------|
| Regulatory Compliance       |                      |
| Certificate of Conformance: | <a href="#">View</a> |

## Product Details

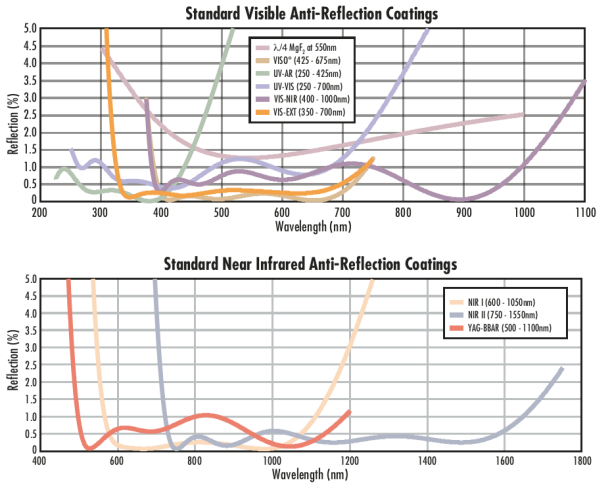
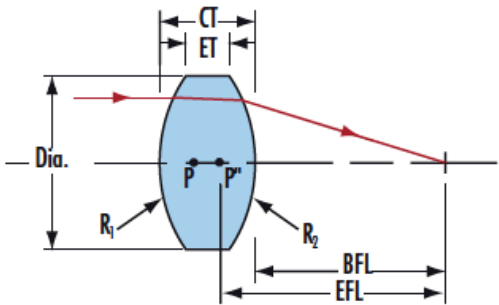
- Ideal for Imaging Applications
- Mnimize Aberrations Including Spherical and Coma
- Precision Fused Silica Substrate

TECHSPEC® UV Fused Silica Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) between 0.2 and 5. At a conjugate ratio of 1, aberrations such as spherical aberration, chromatic aberration, coma, and distortion are minimized or canceled due to the symmetric lens design. TECHSPEC® UV Fused Silica Double-Convex (DCX) Lenses have a precision fused silica substrate. These lenses are available uncoated or with UV-AR, UV-VIS, VIS-EXT, VIS-NIR, VIS 0°, NIR I, or NIR II coatings.

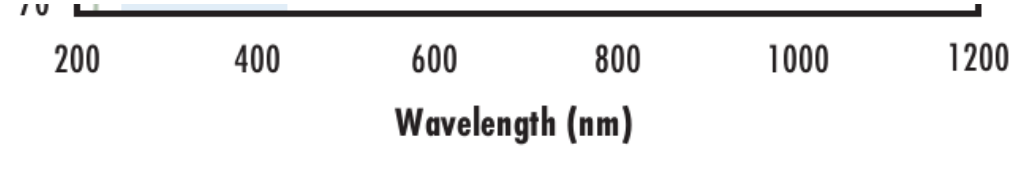
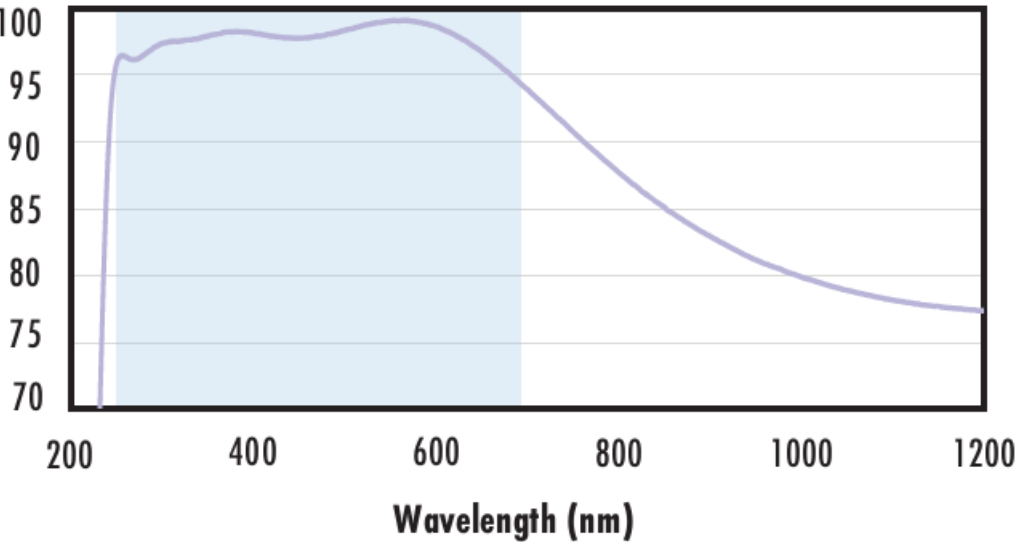
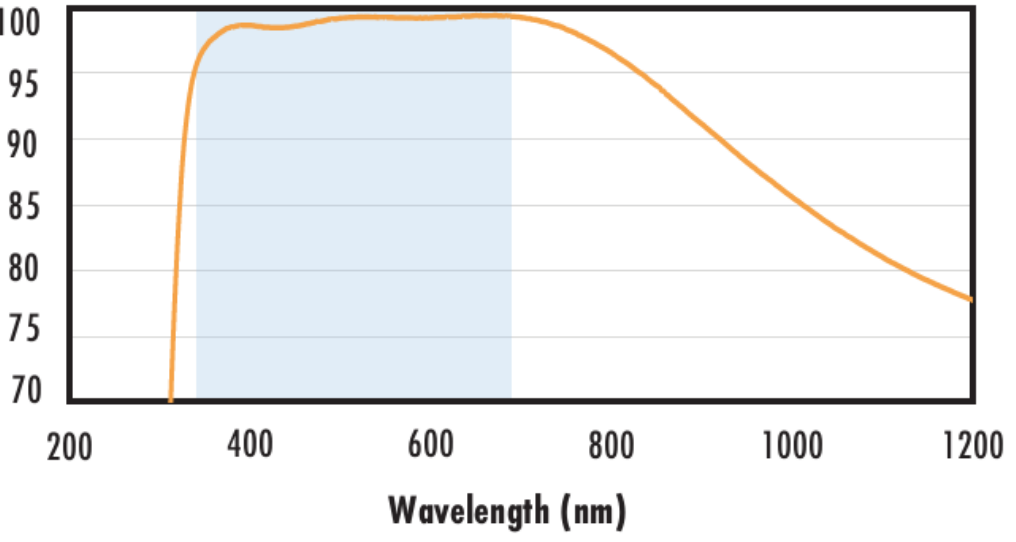
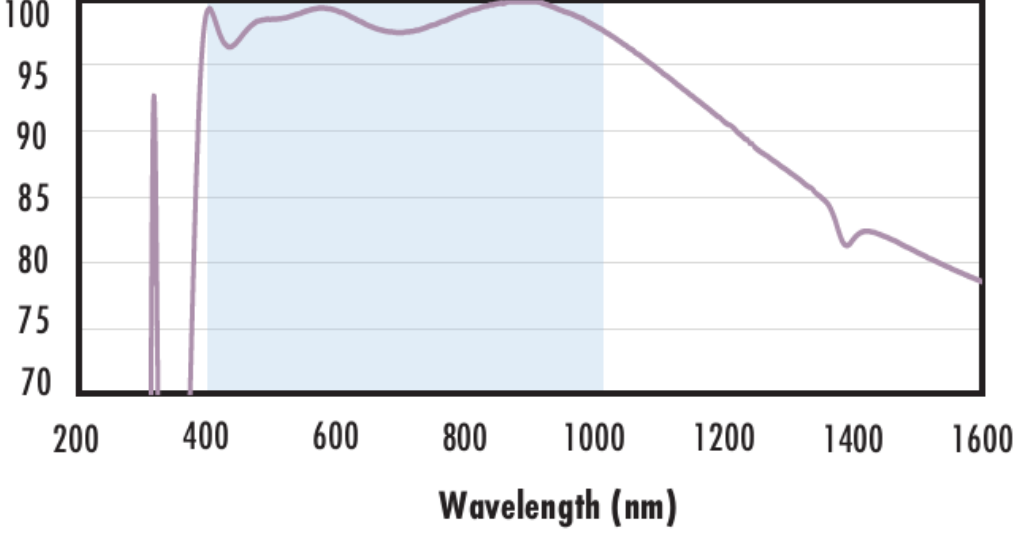
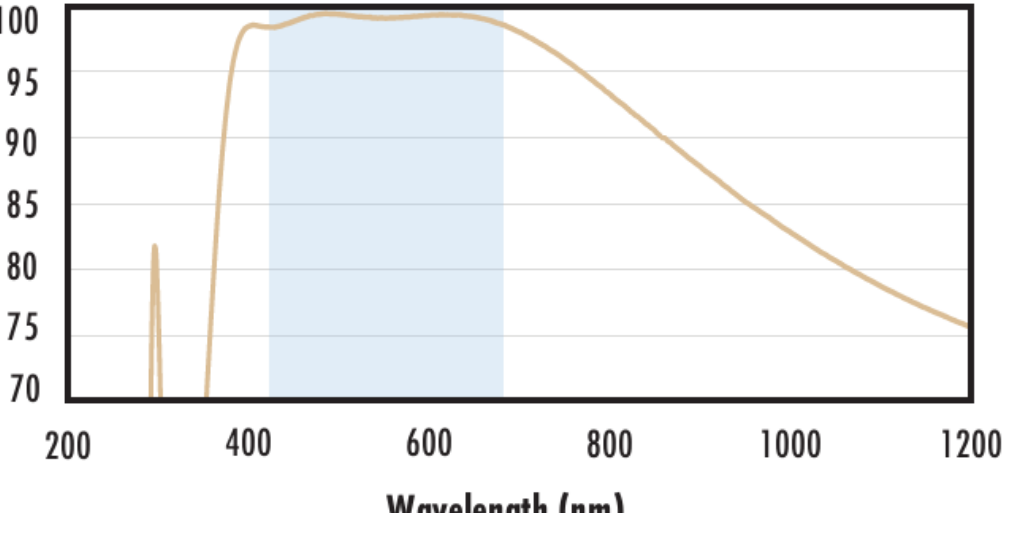
## Technical Information



UV FS Transmission Curve



| FUSED SILICA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><h3>Uncoated Fused Silica<br/>Typical Transmission</h3><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><h3>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</h3><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}</math> (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>                                                                                       |  |
| <div><h3>Fused Silica with UV-AR Coating<br/>Typical Transmission</h3><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></div> |  |

|                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p data-bbox="573 255 1083 365"><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1329 418 1850 468">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 480 1850 531">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 543 1703 593"><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 629 1850 679">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 691 1703 712"><a href="#">Click Here to Download Data</a></p>                                                                        |
| <p data-bbox="567 934 1089 1044"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 1121 1850 1172">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1184 1850 1234">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1246 1703 1267"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1279 1850 1329">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1341 1703 1362"><a href="#">Click Here to Download Data</a></p>                                                                                                                          |
| <p data-bbox="573 1614 1083 1724"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1760 1850 1810">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1329 1822 1850 1872">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1884 1703 1955"><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 1991 1850 2041">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2053 1703 2074"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="567 2288 1089 2398"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 2466 1850 2516">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1329 2528 1850 2579">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2591 1703 2611"><math>R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}</math></div> <p data-bbox="1329 2623 1850 2674">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2686 1703 2706"><a href="#">Click Here to Download Data</a></p>                                                                                                                           |

