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TECHSPEC<sup>®</sup> 9mm Dia. x 36mm FL, VIS-NIR Coated, UV Double-Convex Lens



UV Fused Silica Double-Convex (DCX) Lenses



Stock **#63-826** 20+ In Stock

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-

1

+

**S\$204<sup>40</sup>**

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| Volume Pricing |                               |
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| Qty 1-5        | <b>S\$204.40</b> each         |
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General

Double-Convex Lens

Type:

Physical & Mechanical Properties

Diameter (mm):

|                           |                      |
|---------------------------|----------------------|
| 9.00 +0.0/-0.025          |                      |
| Centering (arcmin):       | <1                   |
| Bevel:                    | Protective as needed |
| Center Thickness CT (mm): | 2.00 ±0.05           |
| Edge Thickness ET (mm):   | 1.38                 |
| Clear Aperture CA (mm):   | 8.1                  |

|                                                       |                                                                                                                   |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Optical Properties                                    |                                                                                                                   |
| Back Focal Length BFL (mm):                           | 35.31                                                                                                             |
| Effective Focal Length EFL (mm):                      | 36.00                                                                                                             |
| Coating:                                              | VIS-NIR (400-1000nm)                                                                                              |
| Coating Specification:                                | 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 |
| 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):           | 32.69                                                                                                             |
| f/#:                                                  | 4.00                                                                                                              |
| Focal Length Specification Wavelength (nm):           | 587.6                                                                                                             |
| Focal Length Tolerance (%):                           | ±1                                                                                                                |
| Numerical Aperture NA:                                | 0.13                                                                                                              |
| Wavelength Range (nm):                                | 400 - 1000                                                                                                        |
| Damage Threshold, Reference: <input type="checkbox"/> | 5 J/cm <sup>2</sup> @ 532nm, 10ns                                                                                 |

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

## 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

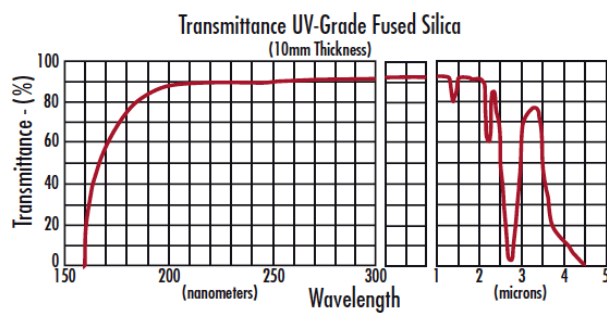
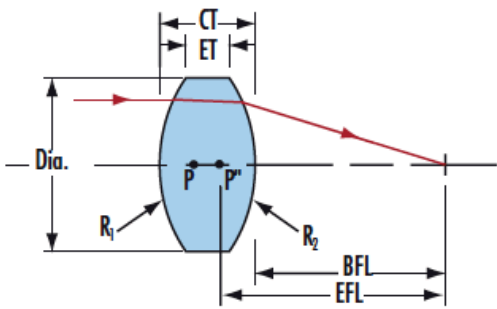
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- Ideal for Imaging Applications
- Minimize 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.

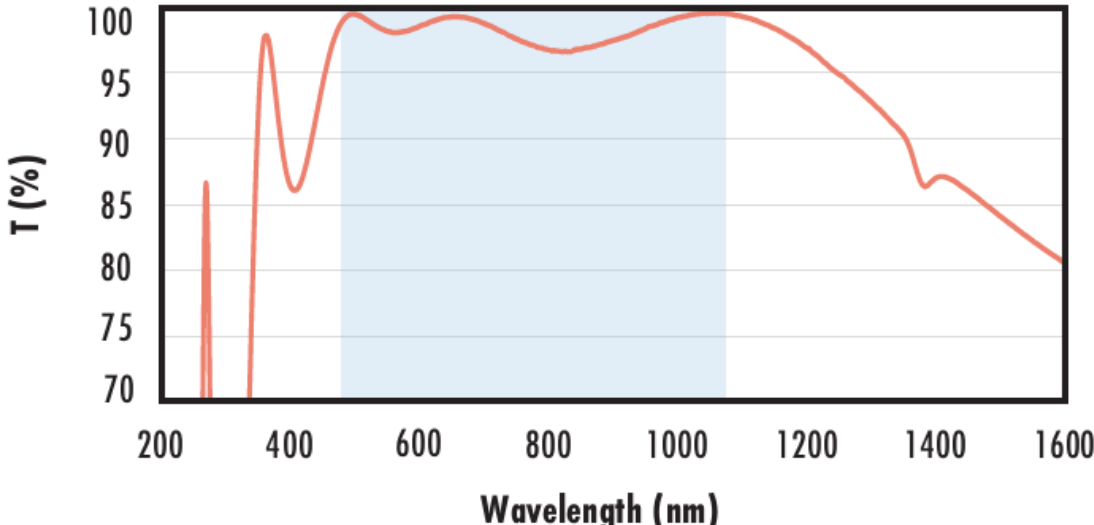
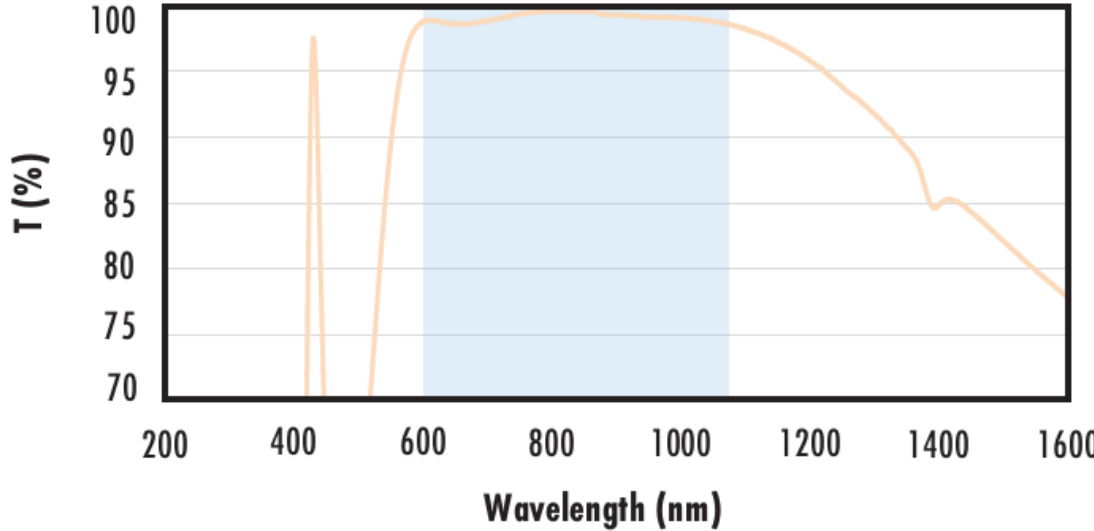
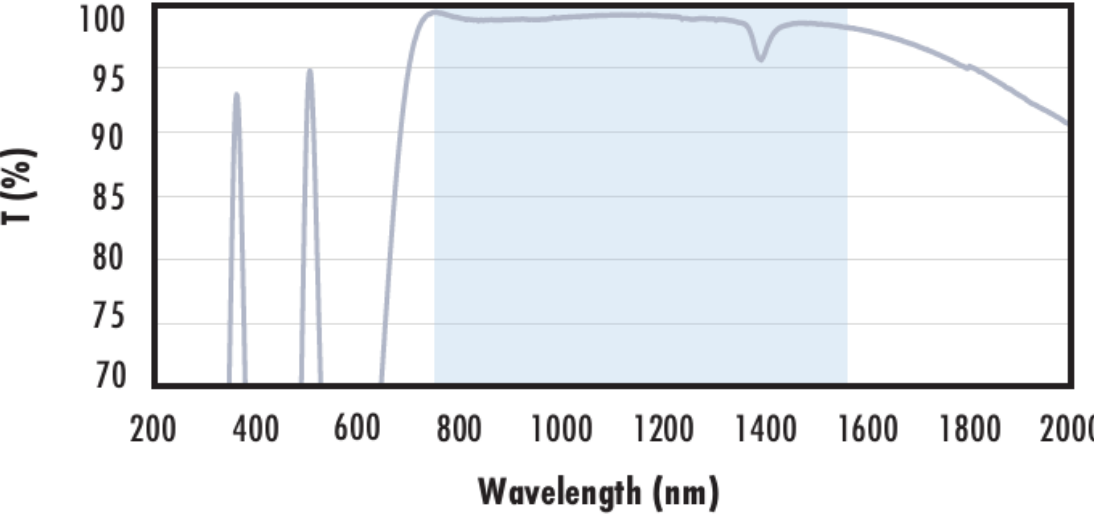
Technical Information



UV FS Transmission Curve

| FUSED SILICA                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><h3>Uncoated Fused Silica<br/>Typical Transmission</h3></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><h3>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</h3></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 - 700nm</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><h3>Fused Silica with UV-AR Coating<br/>Typical Transmission</h3></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 - 425nm</math><br/><math>R_{avg} \leq 0.75\% @ 250 - 425nm</math><br/><math>R_{avg} \leq 0.5\% @ 370 - 420nm</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> |

|                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                    | <a href="#">Click Here to Download Data</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p data-bbox="573 305 1083 409"><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1329 468 1850 516">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 534 1850 581">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1478 593 1703 641"><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 679 1850 727">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1478 742 1703 765"><a href="#">Click Here to Download Data</a></p>                                                                        |
| <p data-bbox="567 985 1089 1089"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 1172 1850 1219">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1237 1850 1285">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1478 1297 1703 1320"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1335 1850 1383">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1478 1397 1703 1421"><a href="#">Click Here to Download Data</a></p>                                                                                                                          |
| <p data-bbox="571 1662 1085 1765"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1810 1850 1857">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1329 1875 1850 1923">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1467 1935 1713 2006"><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 2044 1850 2092">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1478 2107 1703 2131"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="569 2338 1087 2442"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 2516 1850 2564">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1329 2582 1850 2629">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1478 2641 1703 2665"><math>R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}</math></div> <p data-bbox="1329 2680 1850 2727">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1478 2742 1703 2766"><a href="#">Click Here to Download Data</a></p>                                                                                                                           |

|                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div data-bbox="256 94 1278 798"><div>Wavelength (nm)</div><div><div>Fused Silica with YAG-BBAR Coating</div><div>Typical Transmission</div></div><div>Wavelength (nm)</div></div> | <div data-bbox="1327 335 1850 635"><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><div><div><math>R_{abs} \leq 0.25\%</math> @ 532nm</div><div><math>R_{abs} \leq 0.25\%</math> @ 1064nm</div><div><math>R_{avg} \leq 1.0\%</math> @ 500 - 1100nm</div></div><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 data-bbox="256 851 1278 1484"><div>Fused Silica with NIR I Coating</div><div>Typical Transmission</div></div> <div data-bbox="256 1439 1278 1484">Wavelength (nm)</div>      | <div data-bbox="1327 1035 1850 1288"><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><div><div><math>R_{avg} \leq 0.5\%</math> @ 600 - 1050nm</div></div><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 data-bbox="256 1534 1278 2148"><div>Fused Silica with NIR II Coating</div><div>Typical Transmission</div></div> <div data-bbox="256 2101 1278 2148">Wavelength (nm)</div>   | <div data-bbox="1327 1673 1850 1994"><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><div><div><math>R_{abs} \leq 1.5\%</math> @ 750 - 800nm</div><div><math>R_{abs} \leq 1.0\%</math> @ 800 - 1550nm</div><div><math>R_{avg} \leq 0.7\%</math> @ 750 - 1550nm</div></div><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

Compatible Mounts