

TECHSPEC<sup>®</sup> 9mm Dia. x 12mm FL UV-AR Coated, UV Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#48-673** 20+ In Stock

-

1

+

S\$219<sup>-80</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | S\$219.80 each                |
| Qty 6-25       | S\$175.00 each                |
| Qty 26-49      | S\$163.80 each                |
| Need More?     | <a href="#">Request Quote</a> |

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General

Plano-Convex Lens

Type:

Physical & Mechanical Properties

9.00 +0.0/-0.025

Diameter (mm):

|                                                                                                                       |                                  |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <1                                                                                                                    | Centering (arcmin):              |
| 4.00 ±0.05                                                                                                            | Center Thickness CT (mm):        |
| 1.66                                                                                                                  | Edge Thickness ET (mm):          |
| 8.1                                                                                                                   | Clear Aperture CA (mm):          |
| Protective as needed                                                                                                  | Bevel:                           |
| Optical Properties                                                                                                    |                                  |
| 12.00 @ 587.6nm                                                                                                       | Effective Focal Length EFL (mm): |
| 9.26                                                                                                                  | Back Focal Length BFL (mm):      |
| UV-AR (250-425nm)                                                                                                     | Coating:                         |
| 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 | Coating Specification:           |
| Fused Silica (Corning 7980)                                                                                           | Substrate: □                     |
| 40-20                                                                                                                 | Surface Quality:                 |
| 1.5λ                                                                                                                  | Power (P-V) @ 632.8nm:           |
| λ/4                                                                                                                   | Irregularity (P-V) @ 632.8nm:    |
| ±1                                                                                                                    | Focal Length Tolerance (%):      |
| 5.50                                                                                                                  | Radius R <sub>1</sub> (mm):      |
| 1.33                                                                                                                  | f/#:                             |
| 0.38                                                                                                                  | Numerical Aperture NA:           |
| 250 - 425                                                                                                             | Wavelength Range (nm):           |
| 3 J/cm <sup>2</sup> @ 355nm, 10ns                                                                                     | Damage Threshold, Reference: □   |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| Compliant             | Reach 219:                  |
| View                  | Certificate of Conformance: |

## 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

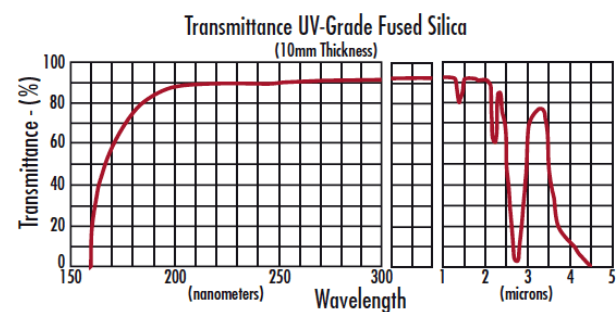
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

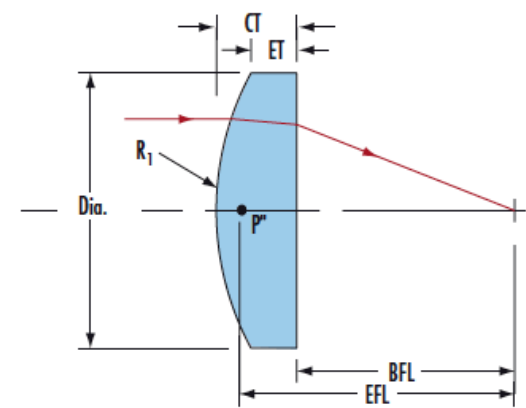
- AR Coated to Provide <0.75% Reflection per Surface for 250 - 425nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses UV-AR Coated feature precision specifications and a [variety of coating options](#) on a broadband substrate. Fused Silica is commonly used in applications from the Ultraviolet (UV) through the Near-Infrared (NIR). Its low index of refraction, low coefficient of thermal expansion, and low inclusion content make it ideal for laser applications and harsh environmental conditions. TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses UV-AR Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are UV-AR coated to increase their coating performance in the ultraviolet region.

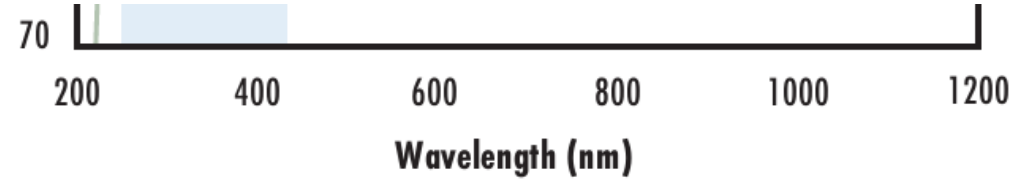
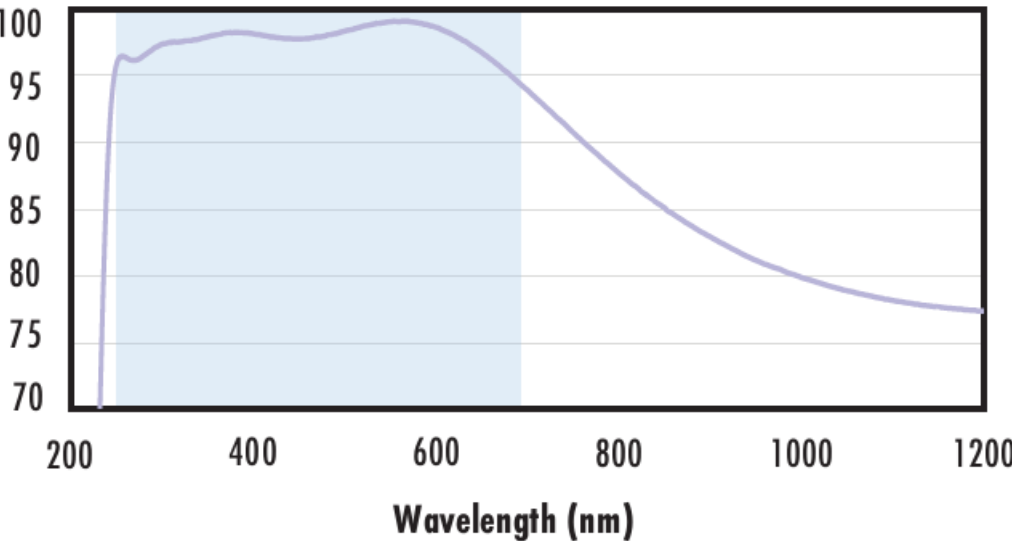
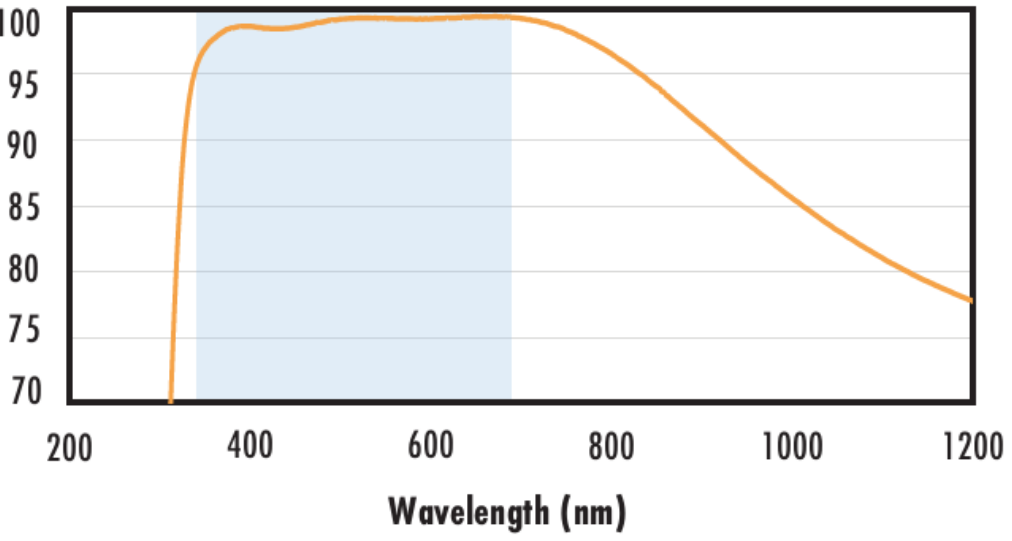
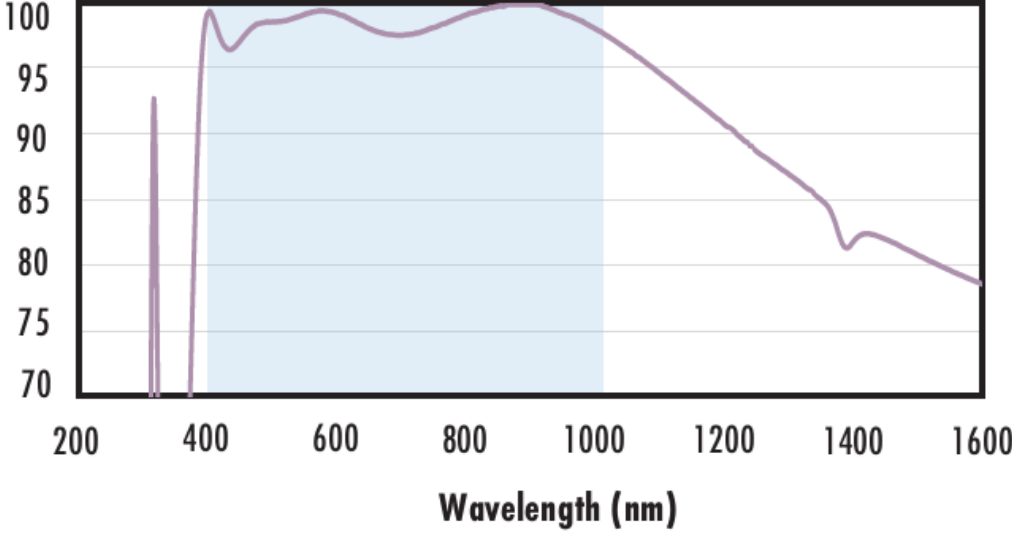
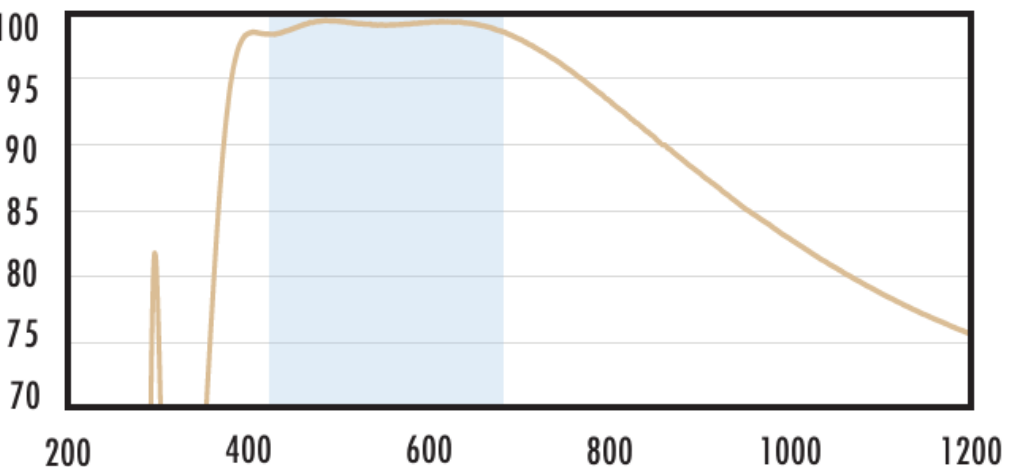
## Technical Information



UV FS Transmission Curve



| FUSED SILICA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>Uncoated Fused Silica Typical Transmission</b></p> <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>                                                                                                                                                                                                                                                                                                                                                                                          |  |
| <p><b>Fused Silica with MgF<sub>2</sub> Coating Typical Transmission</b></p> <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>                                                                                         |  |
| <p><b>Fused Silica with UV-AR Coating 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 data-bbox="573 290 1083 394"><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1329 451 1854 498">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 513 1854 560">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 575 1707 623"><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 661 1854 709">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 724 1707 742"><a href="#">Click Here to Download Data</a></p>                                                                        |
| <p data-bbox="567 970 1077 1074"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 1154 1854 1202">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1216 1854 1264">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1279 1707 1299"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1314 1854 1362">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1377 1707 1394"><a href="#">Click Here to Download Data</a></p>                                                                                                                          |
| <p data-bbox="573 1650 1083 1754"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1792 1854 1840">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1329 1855 1854 1902">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1917 1707 1988"><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 2027 1854 2074">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2089 1707 2107"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="573 2318 1083 2421"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>   | <p data-bbox="1329 2499 1854 2546">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1329 2561 1854 2608">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2623 1707 2644"><math>R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}</math></div> <p data-bbox="1329 2659 1854 2706">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2721 1707 2739"><a href="#">Click Here to Download Data</a></p>                                                                                                                           |

