

TECHSPEC<sup>®</sup> 12mm Dia x 72mm FL Uncoated, UV Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#36-684** 20+ In Stock

[Other Coating Options](#)

-

1

+

£96<sup>.80</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | £96.80 each                   |
| Qty 6-25       | £77.60 each                   |
| Qty 26-49      | £72.80 each                   |
| Need More?     | <a href="#">Request Quote</a> |

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

|                      |                           |
|----------------------|---------------------------|
| 12.00 +0.0/-0.025    | Diameter (mm):            |
| <1                   | Centering (arcmin):       |
| 2.50 ±0.05           | Center Thickness CT (mm): |
| 1.95                 | Edge Thickness ET (mm):   |
| 11                   | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                             |                                  |
|-----------------------------|----------------------------------|
| Optical Properties          |                                  |
| 72.00 @ 587.6nm             | Effective Focal Length EFL (mm): |
| 70.29                       | Back Focal Length BFL (mm):      |
| Uncoated                    | Coating:                         |
| 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 (%):      |
| 33.01                       | Radius R <sub>1</sub> (mm):      |
| 6                           | f/#:                             |
| 0.08                        | Numerical Aperture NA:           |
| 200 - 2200                  | Wavelength Range (nm):           |

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

## Custom

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

- UV-Grade Fused Silica
- Wavelength Range of 200nm to 2.2μm
- Variety of Coating Options Available
- Various Coating Options: [MgF<sub>2</sub>](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses Uncoated 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 Uncoated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications.

## 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> |  |

|                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>20040060080010001200</div> <div>Wavelength (nm)</div>                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <div>Fused Silica with UV-VIS Coating</div> <div>Typical Transmission</div> <div></div> <div>20040060080010001200</div> <div>Wavelength (nm)</div>            | <div>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><div><math>R_{abs} \leq 1.0\%</math> @ 350 - 450nm</div><div><math>R_{avg} \leq 1.5\%</math> @ 250 - 700nm</div></div> <div>Data outside this range is not guaranteed and is for reference only.</div> <div><a href="#">Click Here to Download Data</a></div>                                                         |
| <div>Fused Silica with VIS-EXT Coating</div> <div>Typical Transmission</div> <div></div> <div>20040060080010001200</div> <div>Wavelength (nm)</div>         | <div>Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><div><math>R_{avg} \leq 0.5\%</math> @ 350 - 700nm</div></div> <div>Data outside this range is not guaranteed and is for reference only.</div> <div><a href="#">Click Here to Download Data</a></div>                                                                                                                |
| <div>Fused Silica with VIS-NIR Coating</div> <div>Typical Transmission</div> <div></div> <div>2004006008001000120014001600</div> <div>Wavelength (nm)</div> | <div>Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><div><math>R_{abs} \leq 0.25\%</math> @ 880nm</div><div><math>R_{avg} \leq 1.25\%</math> @ 400 - 870nm</div><div><math>R_{avg} \leq 1.25\%</math> @ 890 - 1000nm</div></div> <div>Data outside this range is not guaranteed and is for reference only.</div> <div><a href="#">Click Here to Download Data</a></div> |
| <div>Fused Silica with VIS 0° Coating</div> <div>Typical Transmission</div> <div></div> <div>20040060080010001200</div> <div>Wavelength (nm)</div>          | <div>Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><div><math>R_{avg} \leq 0.4\%</math> @ 425 - 675nm</div></div> <div>Data outside this range is not guaranteed and is for reference only.</div> <div><a href="#">Click Here to Download Data</a></div>                                                                                                                 |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div><div>Fused Silica with YAG-BBAR Coating</div><div>Typical Transmission</div></div><div><div><div>T (%)</div><div>100</div><div>95</div><div>90</div><div>85</div><div>80</div><div>75</div><div>70</div></div><div><div><div>200</div><div>400</div><div>600</div><div>800</div><div>1000</div><div>1200</div><div>1400</div><div>1600</div></div><div><div>Wavelength (nm)</div></div></div><div></div></div></div>                               | <div><div>Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><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></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div>           |
| <div><div><div>Fused Silica with NIR I Coating</div><div>Typical Transmission</div></div><div><div><div>T (%)</div><div>100</div><div>95</div><div>90</div><div>85</div><div>80</div><div>75</div><div>70</div></div><div><div><div>200</div><div>400</div><div>600</div><div>800</div><div>1000</div><div>1200</div><div>1400</div><div>1600</div></div><div><div>Wavelength (nm)</div></div></div><div></div></div></div>                                 | <div><div>Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><div><math>R_{avg} \leq 0.5\%</math> @ 600 - 1050nm</div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div>                                                                                                                              |
| <div><div><div>Fused Silica with NIR II Coating</div><div>Typical Transmission</div></div><div><div><div>T (%)</div><div>100</div><div>95</div><div>90</div><div>85</div><div>80</div><div>75</div><div>70</div></div><div><div><div>200</div><div>400</div><div>600</div><div>800</div><div>1000</div><div>1200</div><div>1400</div><div>1600</div><div>1800</div><div>2000</div></div><div><div>Wavelength (nm)</div></div></div><div></div></div></div> | <div><div>Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><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></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div> |

Compatible Mounts