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**TECHSPEC® 6.0mm Dia. x -18 FL, UV-AR Coated, UV Plano-Concave Lens**



UV Fused Silica Plano-Concave (PCV) Lenses



Stock **#71-093** **4 In Stock**

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⊖ 1 ⊕ ₹10,510

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| Volume Pricing |                               |
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| Qty 1-5        | ₹10,510 each                  |
| Qty 6-25       | ₹8,408 each                   |
| Qty 26-49      | ₹7,863 each                   |
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**General**

Plano-Concave Lens **Type:**

Max. Flat Annulus is 0.3mm **Note:**

## Physical & Mechanical Properties

6.00 +0.0/-0.025 **Diameter (mm):**

2.00 ±0.05 **Center Thickness CT (mm):**

<1 **Centering (arcmin):**

5.40 **Clear Aperture CA (mm):**

2.45 **Edge Thickness ET (mm):**

## Optical Properties

-18.00 **Effective Focal Length EFL (mm):**

**Substrate:**   
Fused Silica (Corning 7980)

-3.00 **f#:**

-0.17 **Numerical Aperture NA:**

UV-VIS (250-700nm) **Coating:**

250 - 700 **Wavelength Range (nm):**

-19.37 **Back Focal Length BFL (mm):**

**Coating Specification:**  
R<sub>abs</sub> ≤1.0% @ 350 - 450nm  
R<sub>avg</sub> ≤1.5% @ 250 - 700nm

587.6 ±1 **Focal Length Specification Wavelength (nm):**

8.25 **Radius R<sub>1</sub> (mm):**

40-20 **Surface Quality:**

1.5λ **Power (P-V) @ 632.8nm:**

λ/4 **Irregularity (P-V) @ 632.8nm:**

## Regulatory Compliance

[View](#) **Certificate of Conformance:**

China **Country of Origin:**

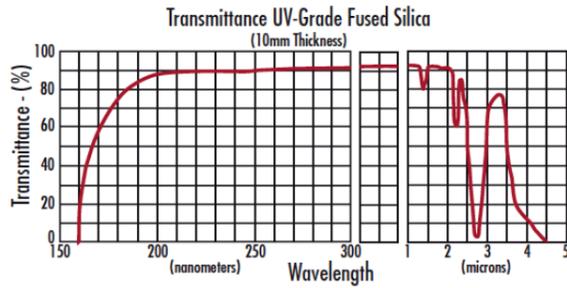
Edmund Optics India Private Limited **Imported By:**

## Product Details

- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Wavelength Range of 200 - 2200nm
- Popular UV-AR Coating Option Available

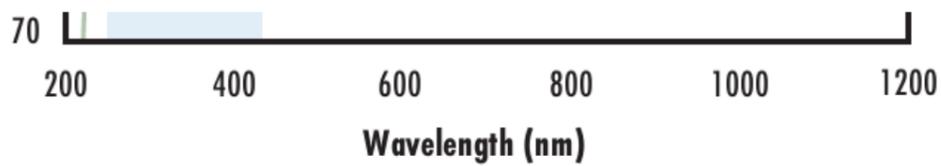
TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are high performance UV optic elements, manufactured utilizing state of the art CNC equipment. Zygo's GPI-XP Interferometer is used to assure the surface accuracy and performance of these UV optics. UV Grade lenses are precision manufactured using research-grade synthetic fused silica. In addition to providing excellent transmission characteristics and higher operating temperatures, synthetic fused silica also exhibits an exceptional inclusion specification and chemical purity. TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are an ideal choice for many laser and imaging applications, particularly those involving ultraviolet wavelengths. A broadband anti-reflection coating is available for optimized throughput in the ultraviolet spectrum.

## Technical Information

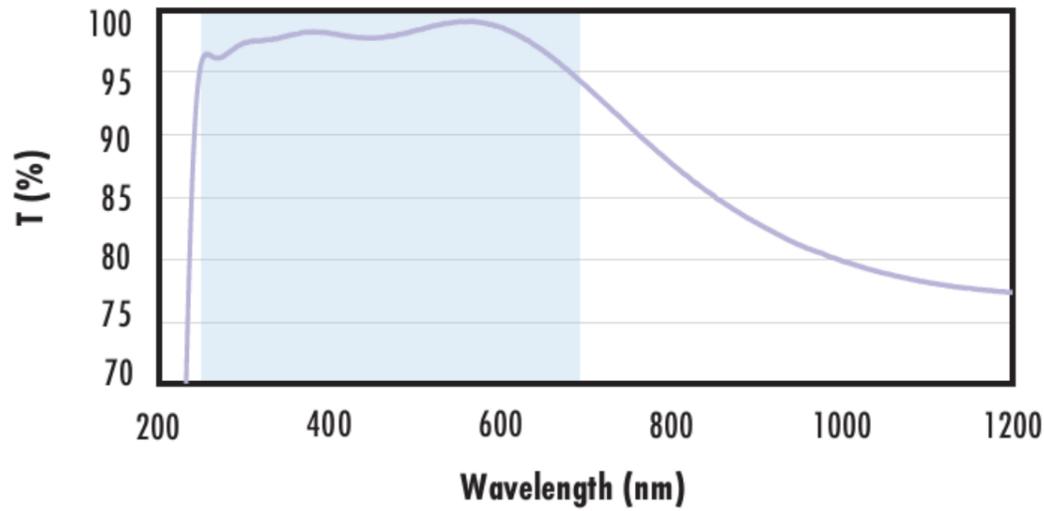


UV FS Transmission Curve

| FUSED SILICA   |   |
|--|---|
| <h3>Uncoated Fused Silica Typical Transmission</h3> <p>The graph shows transmission T (%) on the y-axis (70 to 100) and wavelength in nm on the x-axis (200 to 2200). The transmission is consistently high, around 92-95%, across the entire range, with a small dip at approximately 1400 nm.</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>  |
| <h3>Fused Silica with MgF<sub>2</sub> Coating Typical Transmission</h3> <p>The graph shows transmission T (%) on the y-axis (70 to 100) and wavelength in nm on the x-axis (200 to 2200). A blue shaded region highlights the coating design wavelength range from 400 nm to 700 nm. The transmission is high (around 95%) in this range and remains high across the rest of the spectrum.</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>   |
| <h3>Fused Silica with UV-AR Coating Typical Transmission</h3> <p>The graph shows transmission T (%) on the y-axis (75 to 100) and wavelength in nm on the x-axis (200 to 2200). A blue shaded region highlights the coating design wavelength range from 250 nm to 425 nm. The transmission is very high (near 100%) in this range and then gradually decreases towards the infrared region.</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> |



### Fused Silica with UV-VIS Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

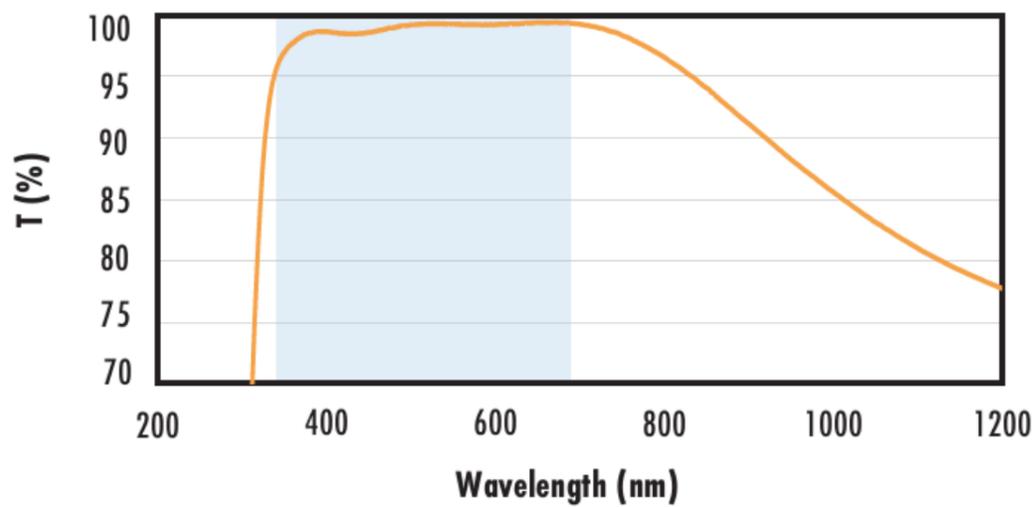
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

$$R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS-EXT Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

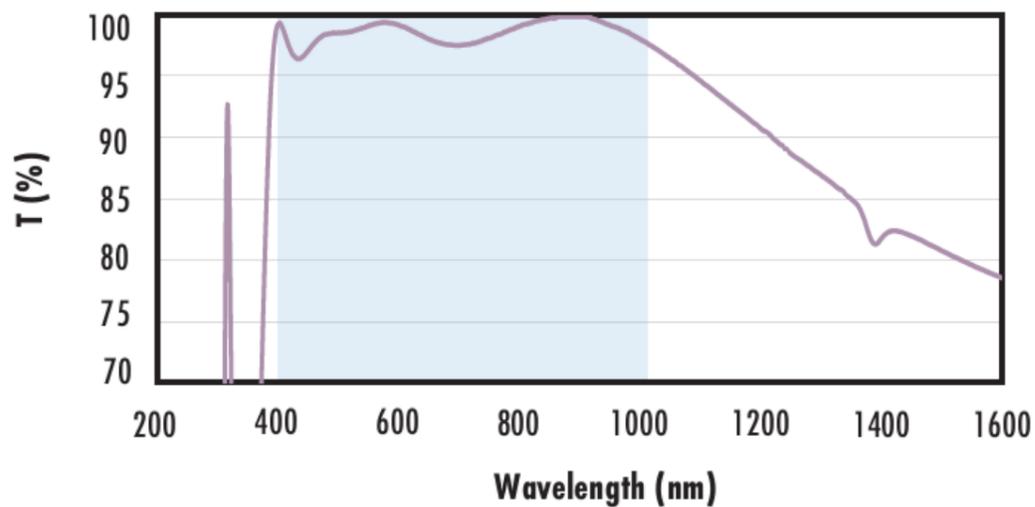
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS-NIR Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$$

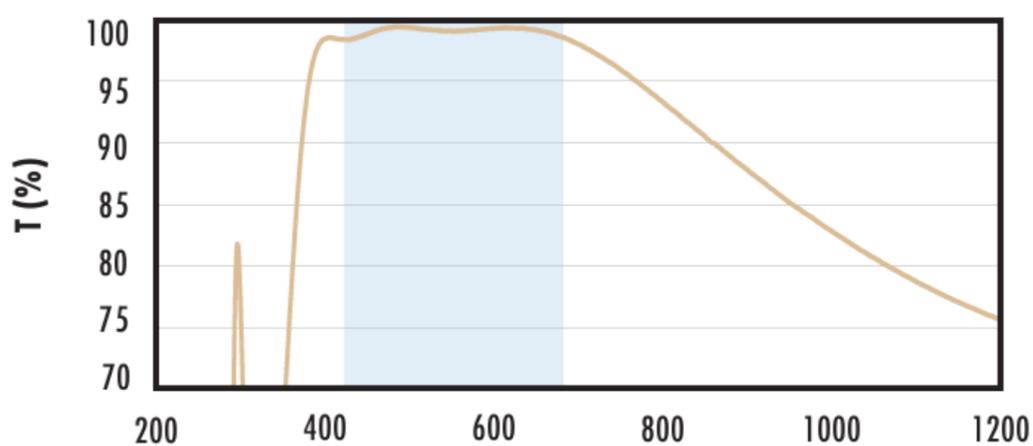
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS 0° Coating Typical Transmission



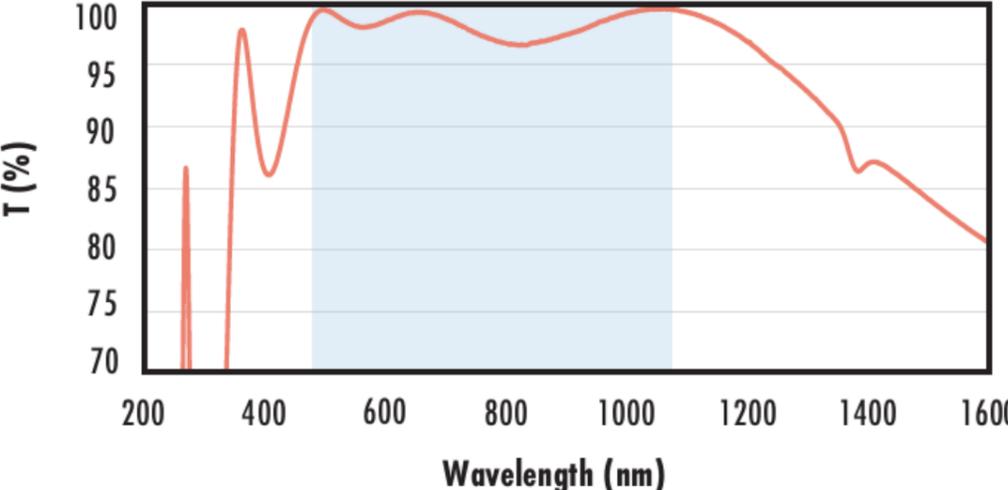
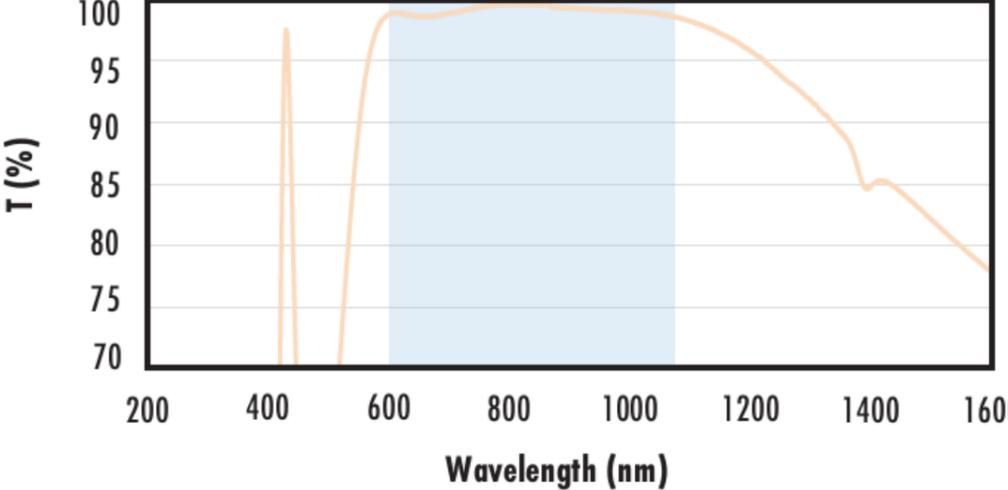
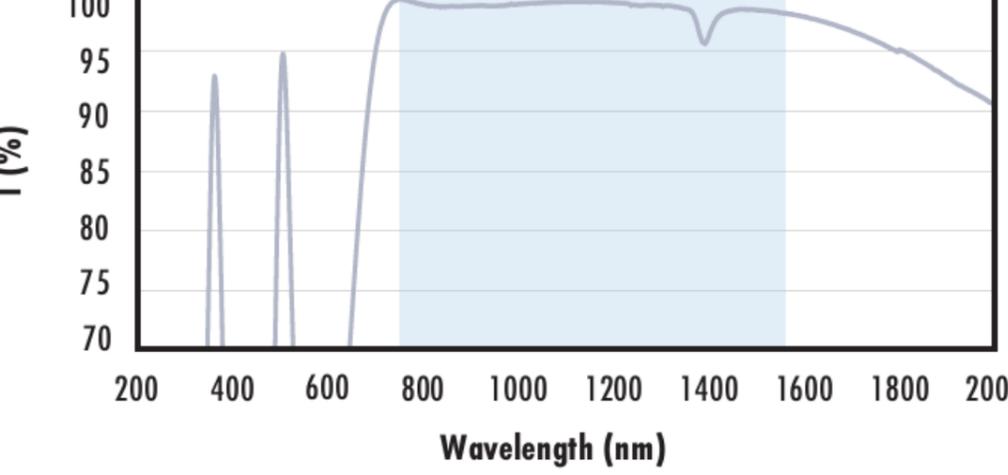
Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

| Wavelength (nm)   |   |
|---|---|
| <p style="text-align: center;"><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <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> <p style="text-align: center;"><math>R_{abs} \leq 0.25\%</math> @ 532nm<br/> <math>R_{abs} \leq 0.25\%</math> @ 1064nm<br/> <math>R_{avg} \leq 1.0\%</math> @ 500 - 1100nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>           |
| <p style="text-align: center;"><b>Fused Silica with NIR I Coating</b><br/><b>Typical Transmission</b></p>    | <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> <p style="text-align: center;"><math>R_{avg} \leq 0.5\%</math> @ 600 - 1050nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>   |
| <p style="text-align: center;"><b>Fused Silica with NIR II Coating</b><br/><b>Typical Transmission</b></p>  | <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> <p style="text-align: center;"><math>R_{abs} \leq 1.5\%</math> @ 750 - 800nm<br/> <math>R_{abs} \leq 1.0\%</math> @ 800 - 1550nm<br/> <math>R_{avg} \leq 0.7\%</math> @ 750 - 1550nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p> |

## 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](#).