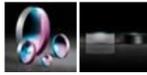


[See all 68 Products in Family](#)

**TECHSPEC® 25.0mm Dia. x -100 FL, UV-AR Coated, UV Plano-Concave Lens**



UV Fused Silica Plano-Concave (PCV) Lenses



Stock #48-323 **10 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ A\$262<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	A\$262.40 each
Qty 6-25	A\$211.20 each
Qty 26-49	A\$196.80 each
Need More?	<a href="#">Request Quote</a>

Product Downloads

**General**

Plano-Concave Lens **Type:**

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

## Physical & Mechanical Properties

**Diameter (mm):**  
25.00 +0.0/-0.025

**Center Thickness CT (mm):**  
2.50

**Center Thickness Tolerance (mm):**  
±0.10

**Centering (arcmin):**  
<1

**Clear Aperture CA (mm):**  
24

**Edge Thickness ET (mm):**  
4.15

## Optical Properties

**Effective Focal Length EFL (mm):**  
-100.00

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

**f#:**  
4.00

**Numerical Aperture NA:**  
0.13

**Coating:**  
UV-AR (250-425nm)

**Wavelength Range (nm):**  
250 - 425

**Back Focal Length BFL (mm):**  
-101.71

**Coating Specification:**  
R<sub>abs</sub> ≤1.0% @ 250 - 425nm  
R<sub>avg</sub> ≤0.75% @ 250 - 425nm  
R<sub>avg</sub> ≤0.5% @ 370 - 420nm

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

**Focal Length Tolerance (%):**  
±1

**Radius R<sub>1</sub> (mm):**  
-45.84

**Surface Quality:**  
40-20

**Damage Threshold, Reference:**   
3 J/cm<sup>2</sup> @ 355nm, 10ns

**Power (P-V) @ 632.8nm:**  
1.5λ

**Irregularity (P-V) @ 632.8nm:**  
λ/4

## Regulatory Compliance

**RoHS 2015:**  
**Compliant**

**Certificate of Conformance:**  
**View**

**Reach 235:**  
**Compliant**

## 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](#).

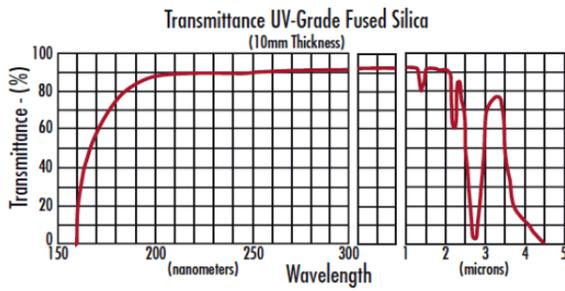
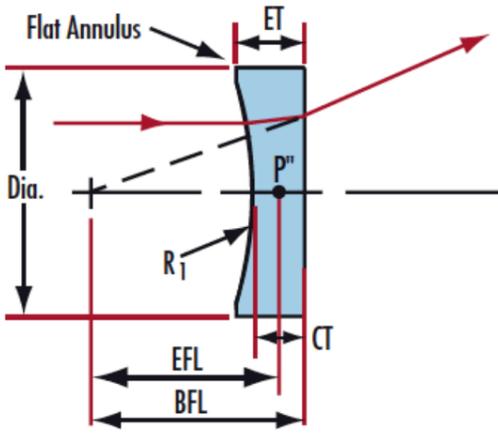
## Product Details

- 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

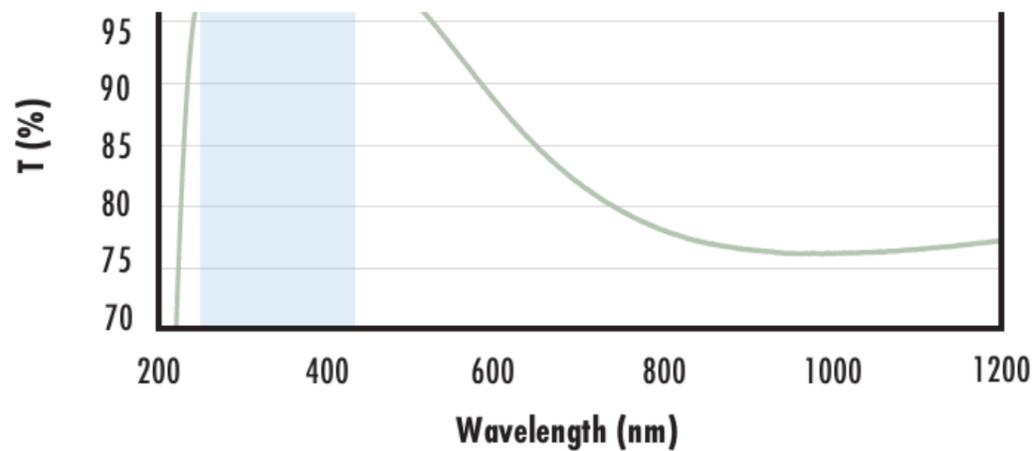
performance of these UV optics. UV Grade lenses are precision manufactured using research-grade synthetic fused silica. In addition to providing excellent transmission characteristics and higher operating temperatures, synthetic fused silica also exhibits an exceptional inclusion specification and chemical 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	
<p style="text-align: center;"><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 style="text-align: center;"><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><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 style="text-align: center;"><math>R_{avg} \leq 1.75\% @ 400 - 700\text{nm (N-BK7)}</math></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 UV-AR Coating Typical Transmission</b></p>	<p>Typical transmission of a 3mm thick fused silica window with UV-</p>



AR (250-425nm) coating at 0° AOI.

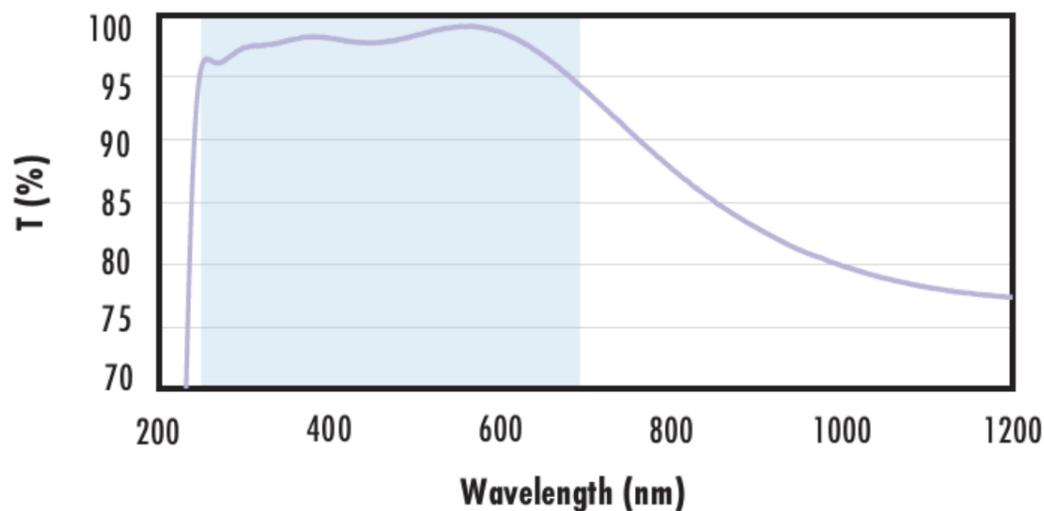
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 1.0\%$  @ 250 - 425nm  
 $R_{avg} \leq 0.75\%$  @ 250 - 425nm  
 $R_{avg} \leq 0.5\%$  @ 370 - 420nm

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

[Click Here to Download Data](#)

### 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.

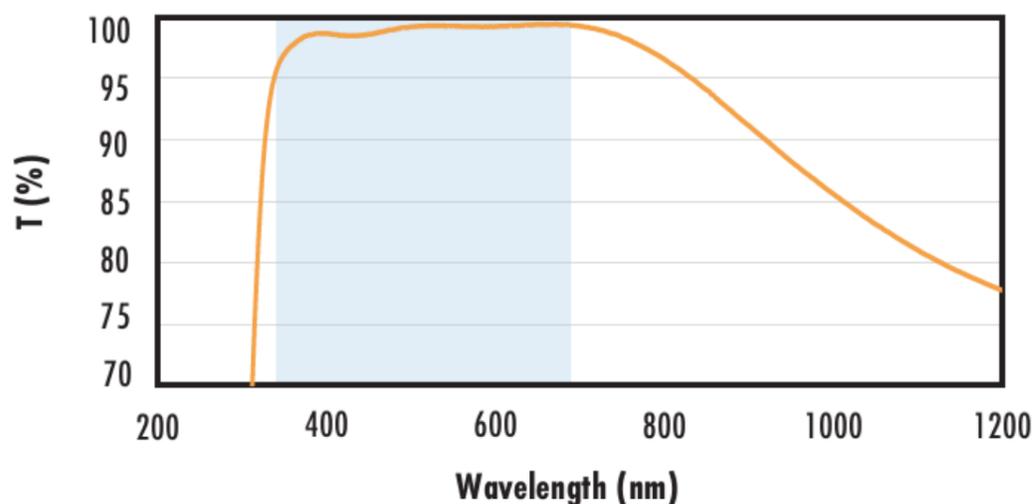
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 1.0\%$  @ 350 - 450nm  
 $R_{avg} \leq 1.5\%$  @ 250 - 700nm

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.

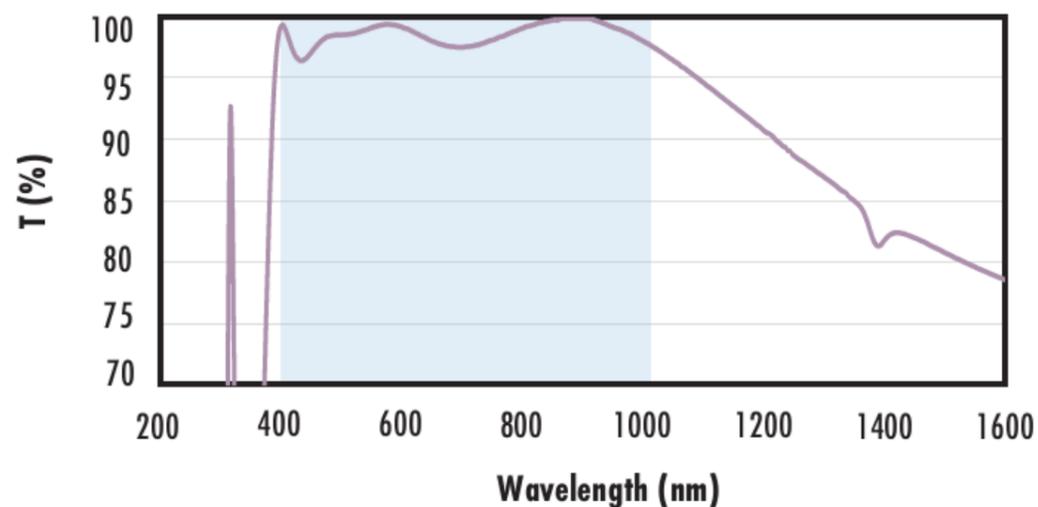
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

$R_{abs} \leq 0.25\%$  @ 880nm  
 $R_{avg} \leq 1.25\%$  @ 400 - 870nm  
 $R_{avg} \leq 1.25\%$  @ 890 - 1000nm

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

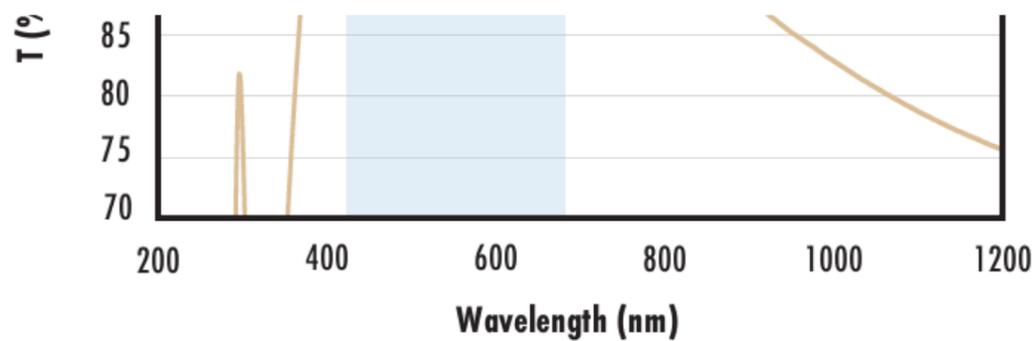
[Click Here to Download Data](#)

### 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.

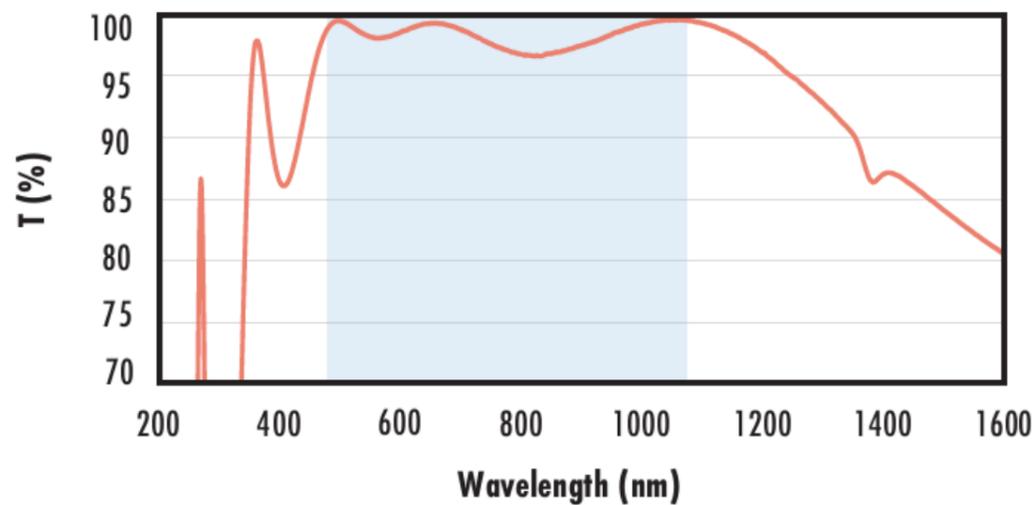
The blue shaded region indicates the coating design wavelength range, with the following specification:



$R_{avg} \leq 0.4\%$  @ 425 - 675nm  
 Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**Fused Silica with YAG-BBAR Coating  
 Typical Transmission**



Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.

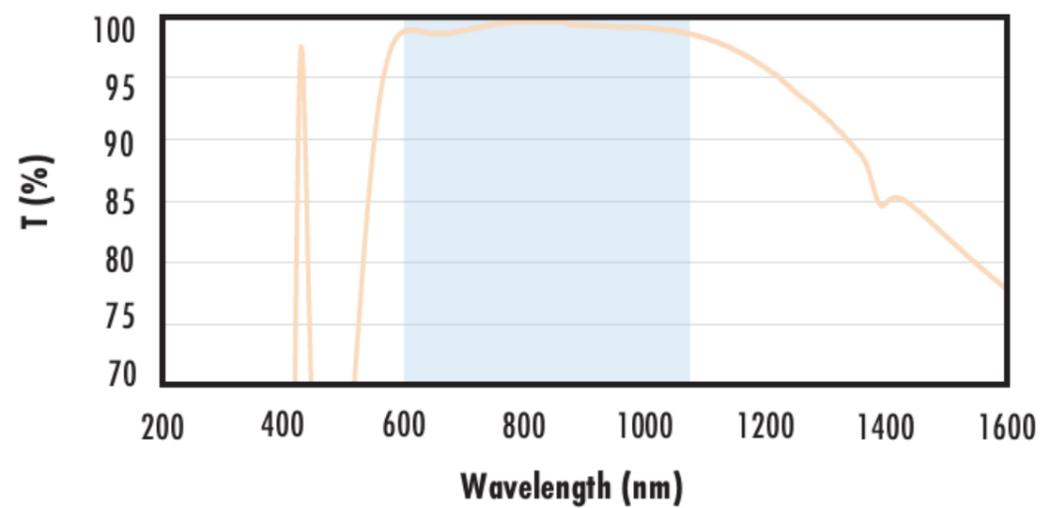
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 0.25\%$  @ 532nm  
 $R_{abs} \leq 0.25\%$  @ 1064nm  
 $R_{avg} \leq 1.0\%$  @ 500 - 1100nm

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

[Click Here to Download Data](#)

**Fused Silica with NIR I Coating  
 Typical Transmission**



Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

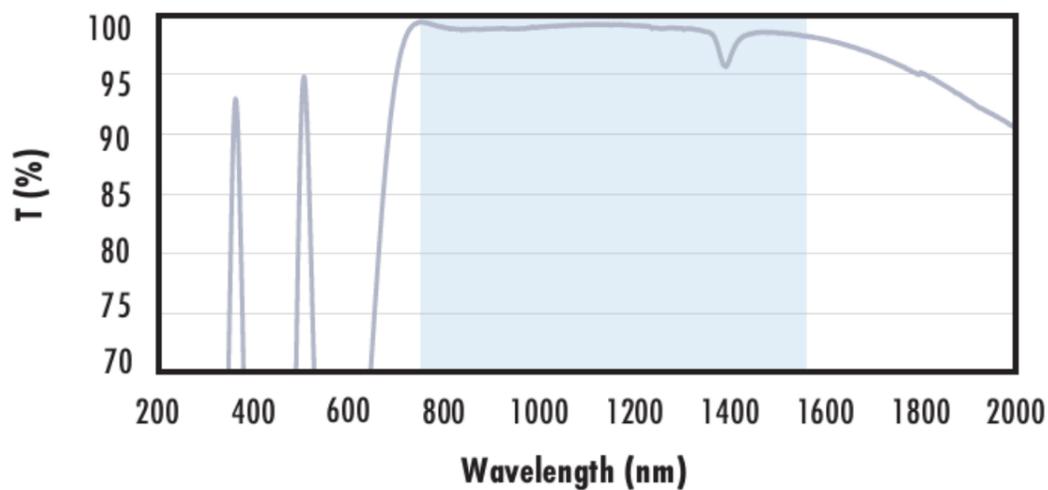
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 0.5\%$  @ 600 - 1050nm

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

[Click Here to Download Data](#)

**Fused Silica with NIR II Coating  
 Typical Transmission**



Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.

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

$R_{abs} \leq 1.5\%$  @ 750 - 800nm  
 $R_{abs} \leq 1.0\%$  @ 800 - 1550nm  
 $R_{avg} \leq 0.7\%$  @ 750 - 1550nm

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

[Click Here to Download Data](#)

**Compatible Mounts**