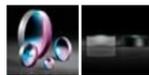


[See all 14 Products in Family](#)

**TECHSPEC® 25mm Dia. x -100mm FL, UV-AR Coated, UV DCV Lens**



UV Fused Silica Plano-Concave (PCV) Lenses



Stock **#48-331** **5 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ ₹12,145

**ADD TO CART**

Volume Pricing	
Qty 1-5	₹12,145 each
Qty 6-25	₹9,731 each
Qty 26-49	₹9,108 each
Need More?	<a href="#">Request Quote</a>

Product Downloads

**General**

Double-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):  
24.0

Edge Thickness ET (mm):  
4.12

## 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):  
-100.85

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 (%):  
±2

Radius R<sub>1</sub>=R<sub>2</sub> (mm):  
-92.08

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

Country of Origin:  
Japan

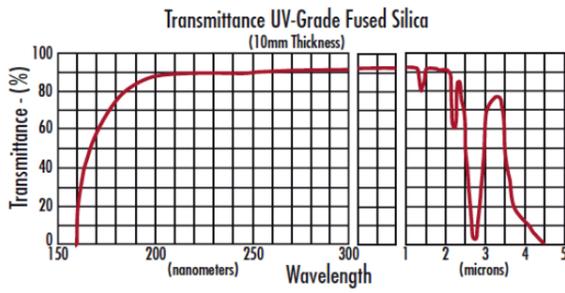
Imported By:  
Edmund Optics India Private Limited

## Product Details

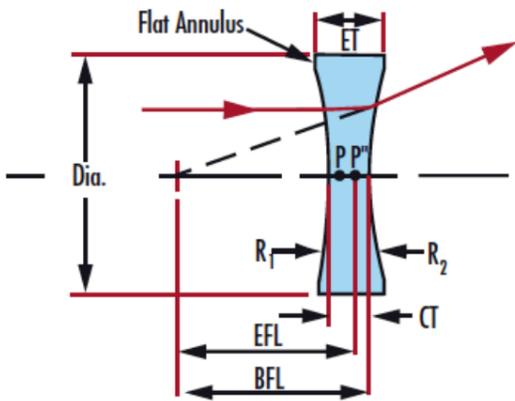
- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Wavelength Range of 200 - 2200nm
- Popular UV-AR Coating Option Available

TECHSPEC® UV Fused Silica Double-Concave (DCV) Lenses are manufactured utilizing state-of-the-art CNC equipment. Zygo's GPI-XP Interferometer is used to ensure the surface accuracy and performance of these optics. UV Grade lenses are precision manufactured using research-grade synthetic fused silica. TECHSPEC® UV Fused Silica Double-Concave (DCV) Lenses, in addition to providing excellent transmission characteristics and higher operating temperatures, synthetic fused silica lenses also exhibit exceptional inclusion specification and chemical purity. These lenses make a superior 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

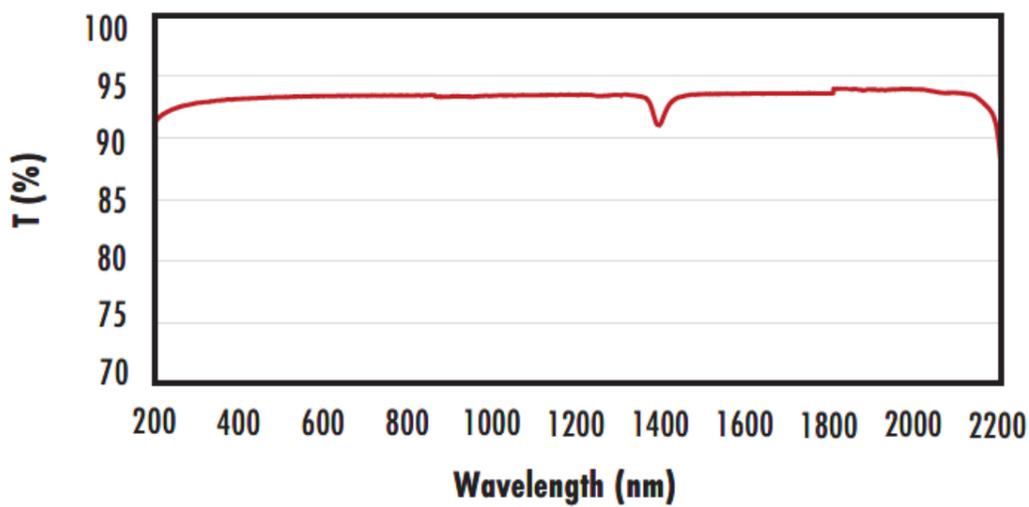


UV FS Transmission Curve



FUSED SILICA

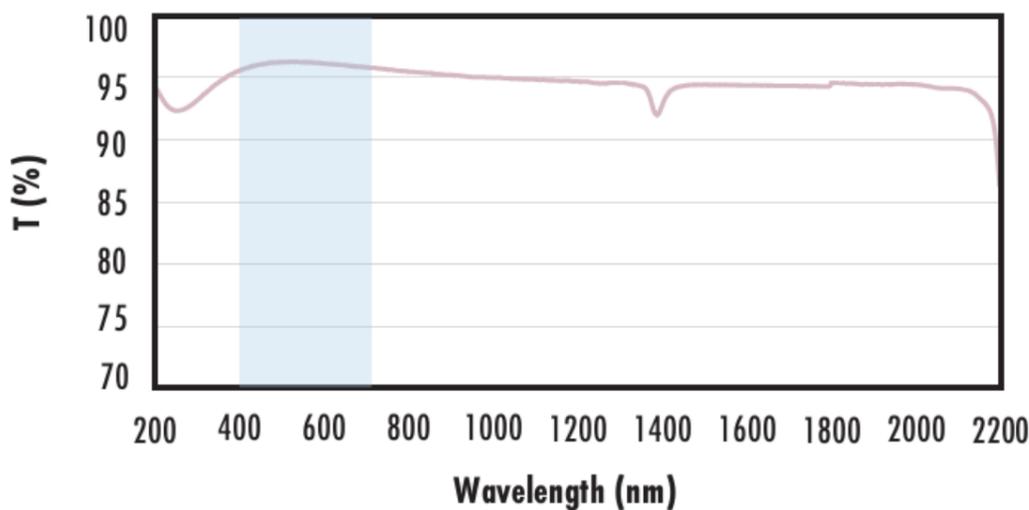
Uncoated Fused Silica  
Typical Transmission



Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.

[Click Here to Download Data](#)

Fused Silica with MgF<sub>2</sub> Coating  
Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

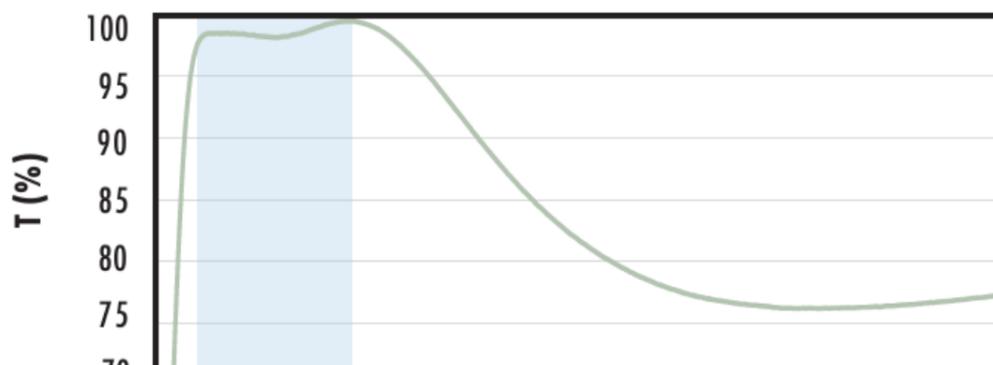
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% @ 400 - 700\text{nm (N-BK7)}$$

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

[Click Here to Download Data](#)

Fused Silica with UV-AR Coating  
Typical Transmission



Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.

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

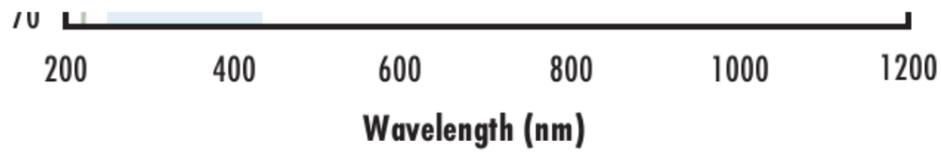
$$R_{abs} \leq 1.0\% @ 250 - 425\text{nm}$$

$$R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$$

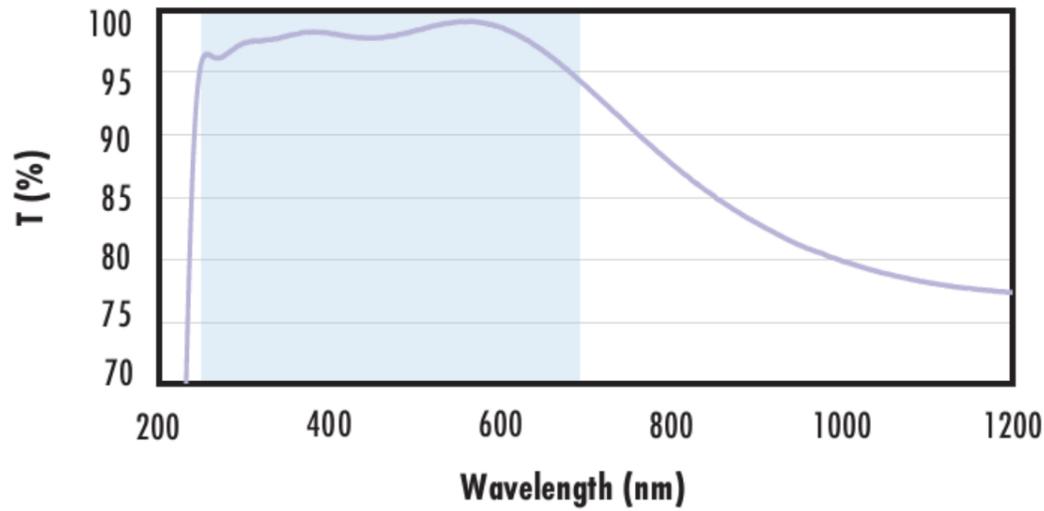
$$R_{avg} \leq 0.5\% @ 370 - 420\text{nm}$$

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:

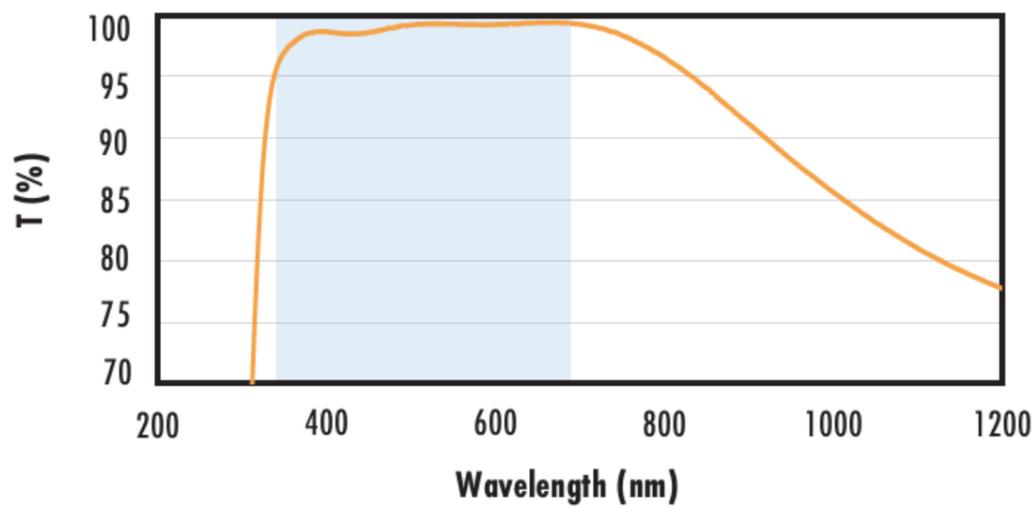
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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.

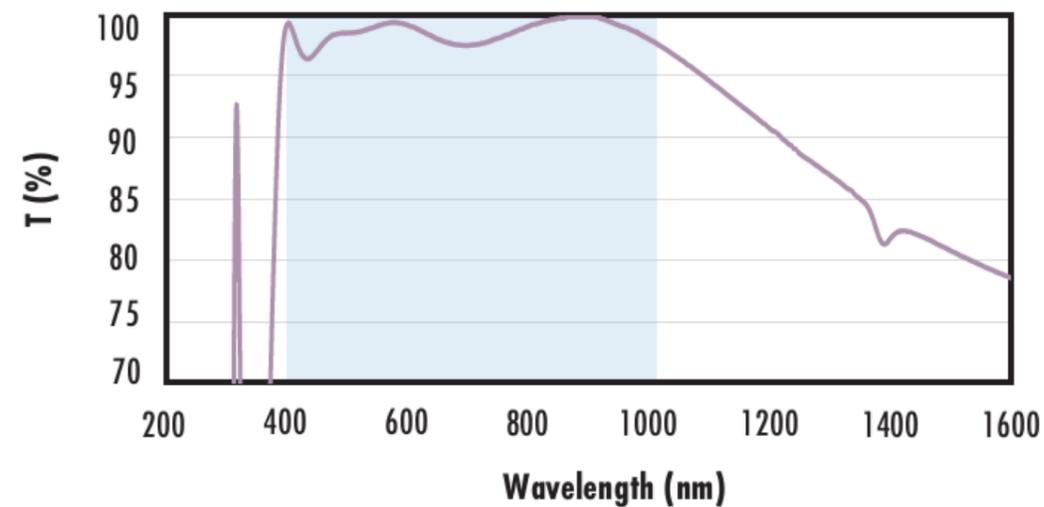
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

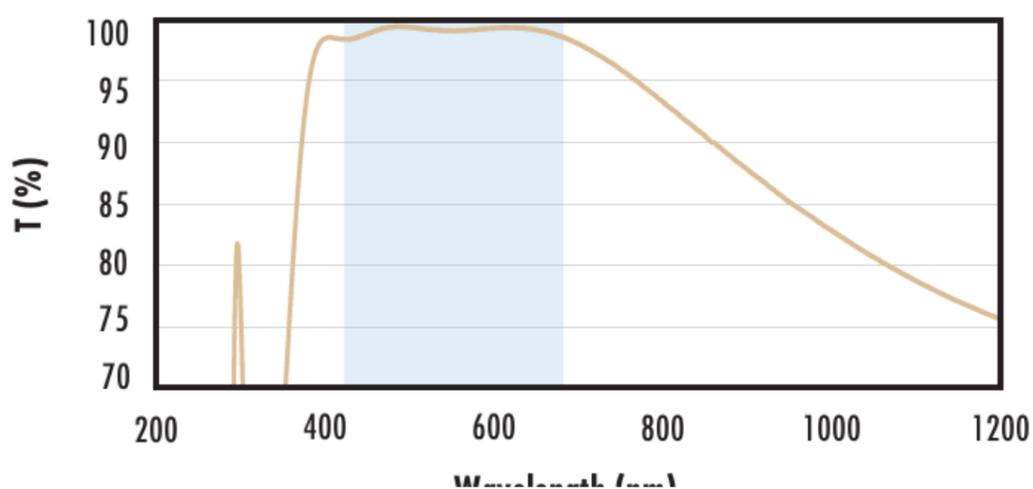
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

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

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><b>Fused Silica with YAG-BBAR Coating</b> <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\% @ 532nm</math>  <math>R_{abs} \leq 0.25\% @ 1064nm</math>  <math>R_{avg} \leq 1.0\% @ 500 - 1100nm</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><b>Fused Silica with NIR I Coating</b> <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\% @ 600 - 1050nm</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><b>Fused Silica with NIR II Coating</b> <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\% @ 750 - 800nm</math>  <math>R_{abs} \leq 1.0\% @ 800 - 1550nm</math>  <math>R_{avg} \leq 0.7\% @ 750 - 1550nm</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>

## 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](#).

## Compatible Mounts