

TECHSPEC® 25.0mm Dia. x -50 FL, Uncoated, UV Plano-Concave Lens

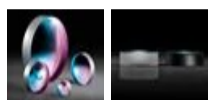


Stock #48-315 **6 In Stock** [Other Coating Options](#)

1 **C\$196^{.00}**

ADD TO CART

UV Fused Silica Plano-Concave (PCV) Lenses



Volume Pricing	
Qty 1-5	C\$196.00 each
Qty 6-25	C\$156.80 each
Qty 26-49	C\$148.40 each
Need More?	Request Quote

Product Downloads

- STEP:stp
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Zemax:zar
- Zemax:zmx
- eDrawing:eprt
- Code V:seq
- EO Spec Sheet
- [Download All](#)

General

Type: Plano-Concave Lens

Note: Max. Flat Annulus is 0.3mm

Physical & Mechanical Properties

Diameter (mm): 25.00
+0.0/-0.025

Center Thickness CT (mm): 2.00

Center Thickness Tolerance (mm): ±0.10

Centering (arcmin): <1

Clear Aperture CA (mm): 24

Edge Thickness ET (mm): 5.52

Optical Properties

Effective Focal Length EFL (mm): -50.00

Substrate: [Fused Silica](#) (Corning 7980)

f/#: 2.00

Numerical Aperture NA: 0.25

Coating: Uncoated

Wavelength Range (nm): 200 - 2200

Back Focal Length BFL (mm): -51.37

Focal Length Specification Wavelength (nm): 587.6

Focal Length Tolerance (%): ±1

Radius R₁ (mm): -22.92

Surface Quality: 40-20

Power (P-V) @ 632.8nm: 1.5λ

Irregularity $\lambda/4$
(P-V) @
632.8nm:

Regulatory Compliance

RoHS 2015: **Compliant**

Reach 223: **Compliant**

Certificate of Conformance: **View**

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

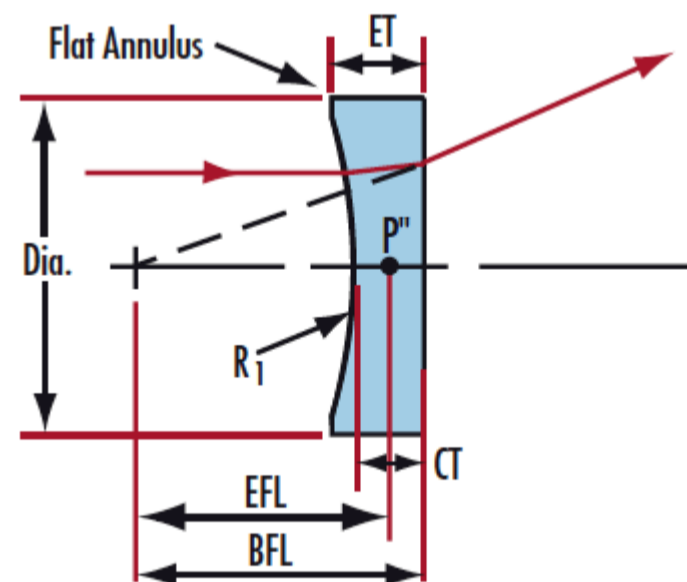
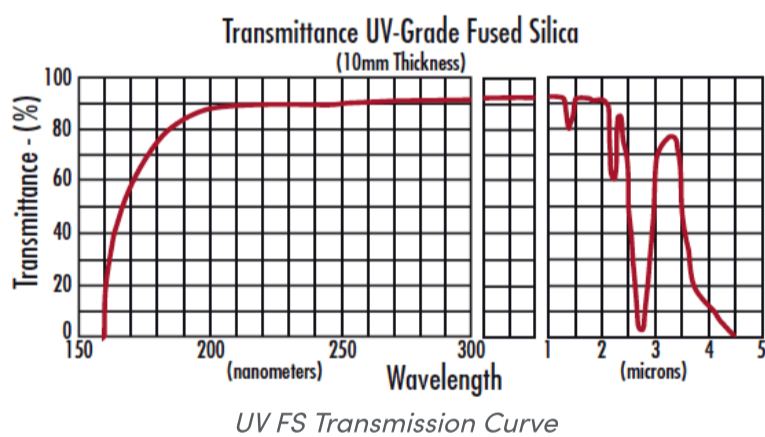
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

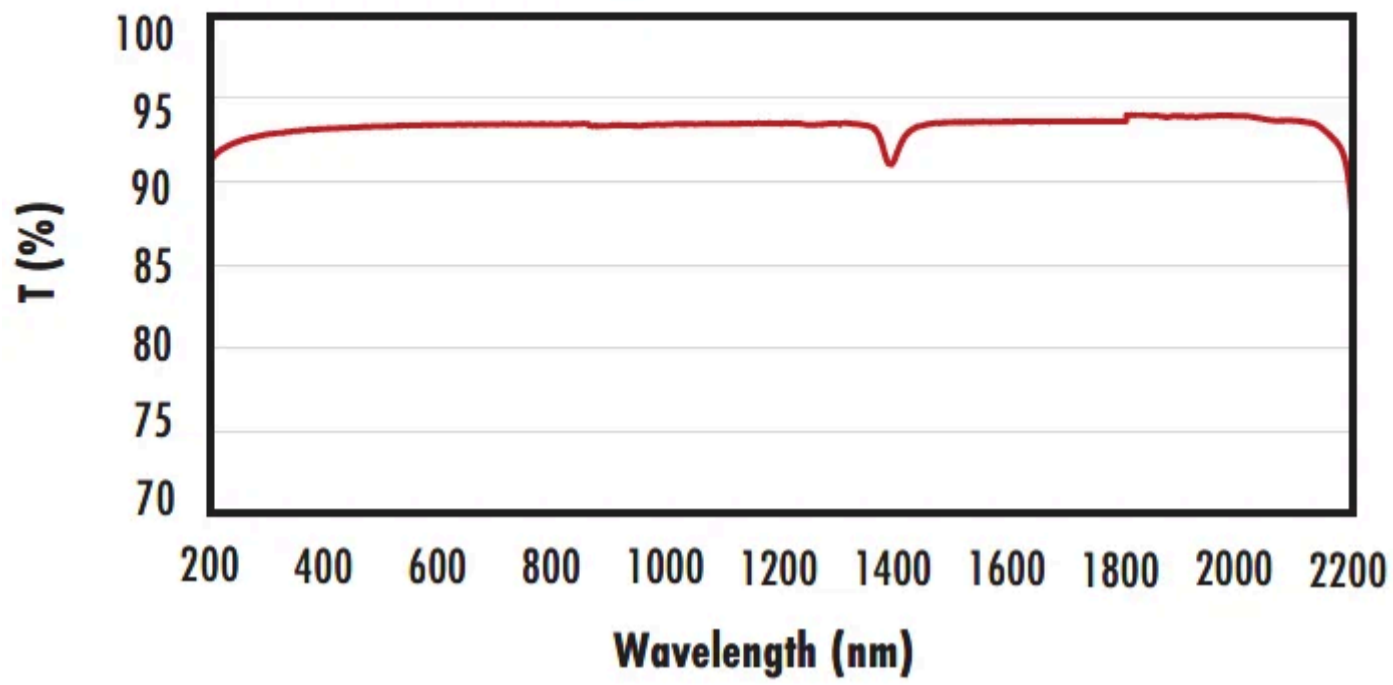
- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Wavelength Range of 200 - 2200nm
- Popular UV-AR Coating Option Available

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



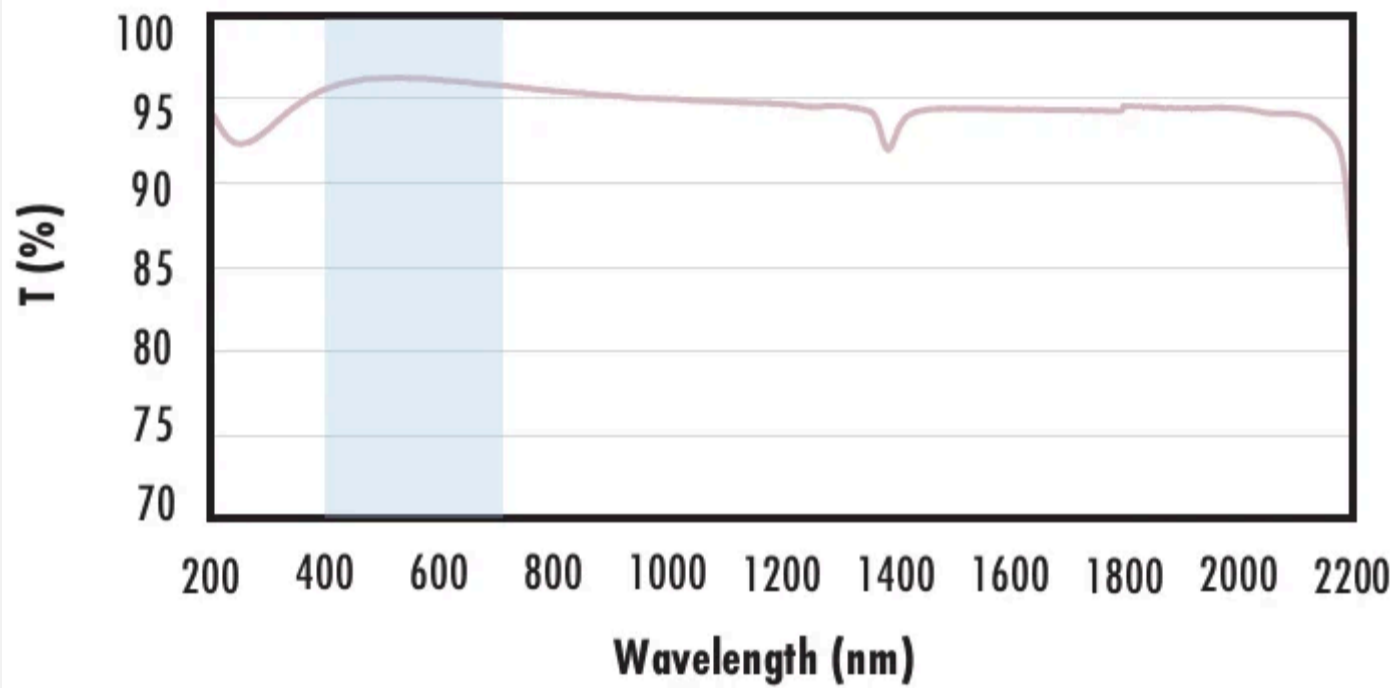
Uncoated Fused Silica Typical Transmission



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

[Click Here to Download Data](#)

Fused Silica with MgF₂ Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF₂ (400-700nm) coating at 0° AOI.

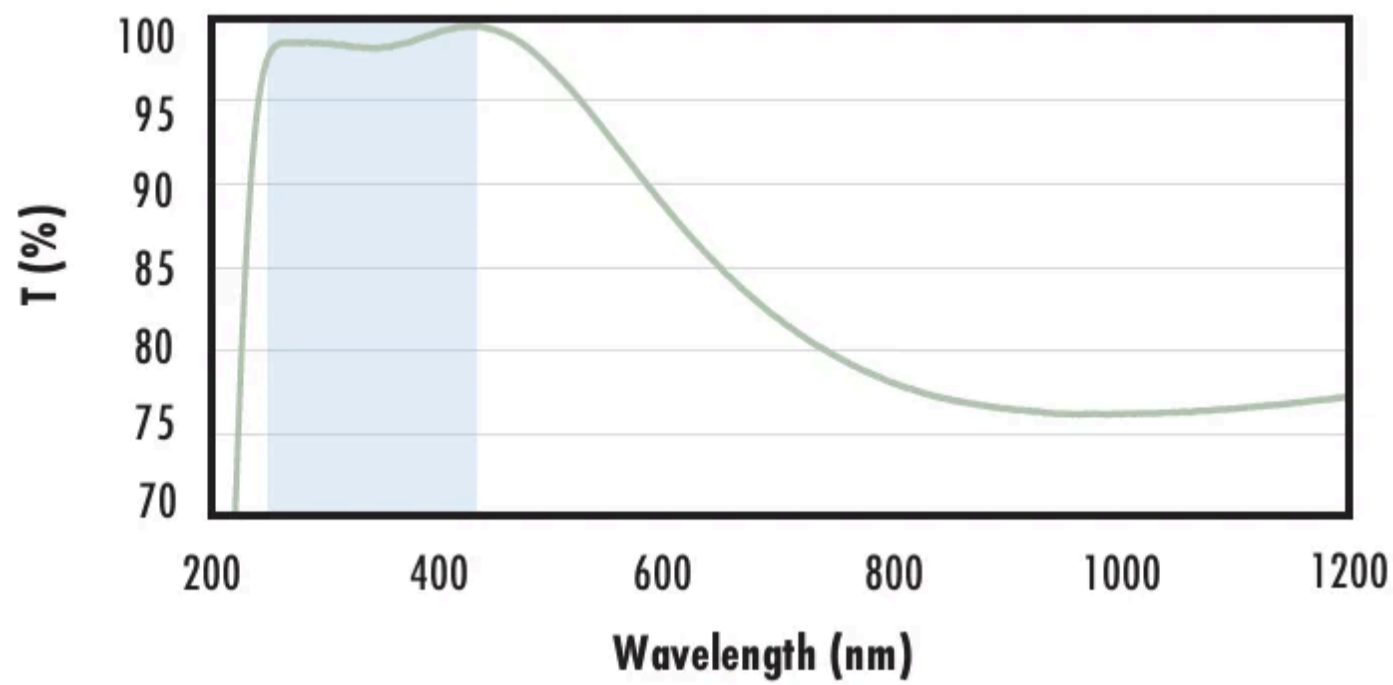
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

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

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

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:

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

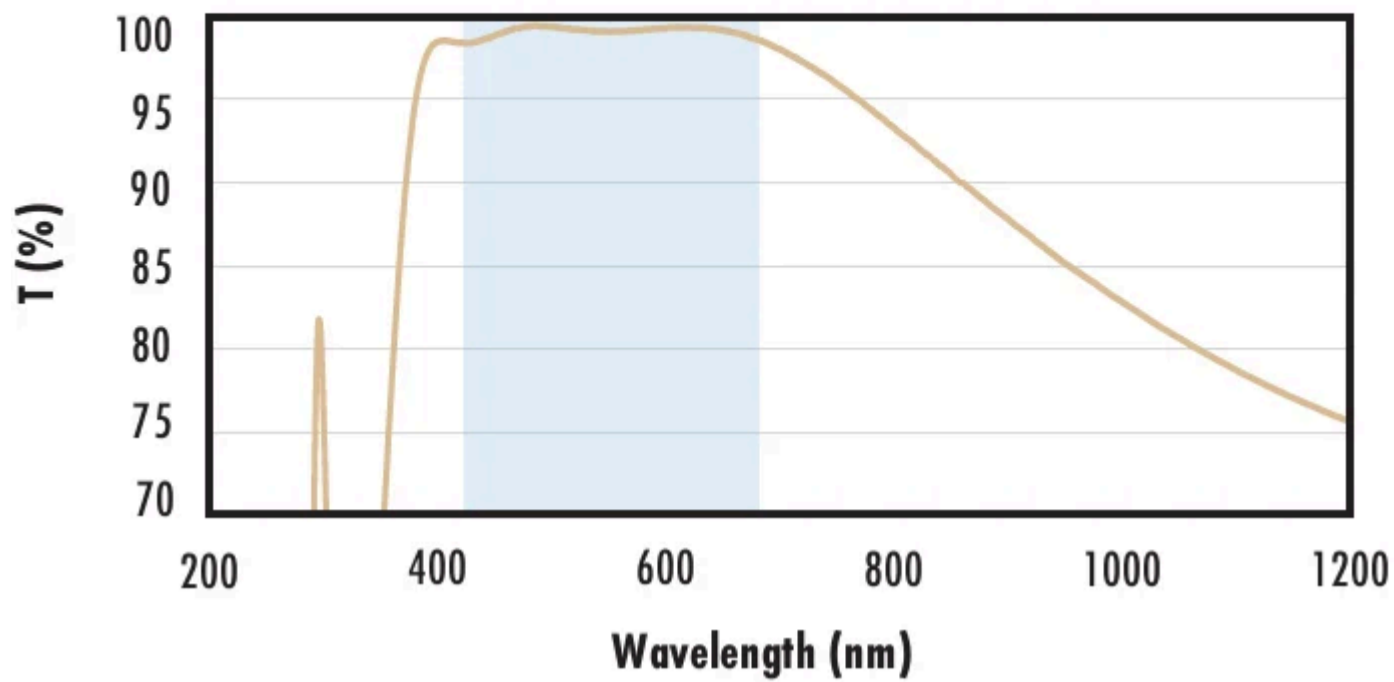
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

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

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 wind with VIS 0° (425–675nm) coating at 0° AOI.

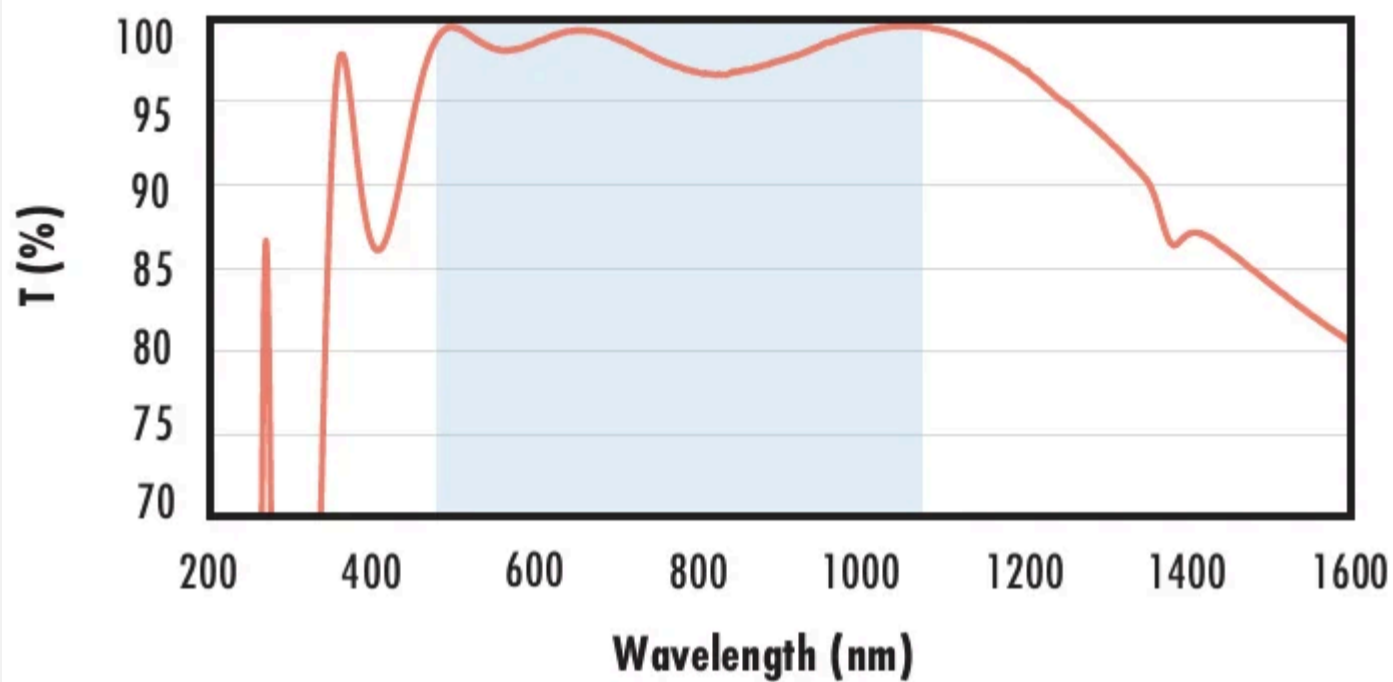
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

Fused Silica with YAG-BBAR Coating Typical Transmission



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

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

$$R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}$$

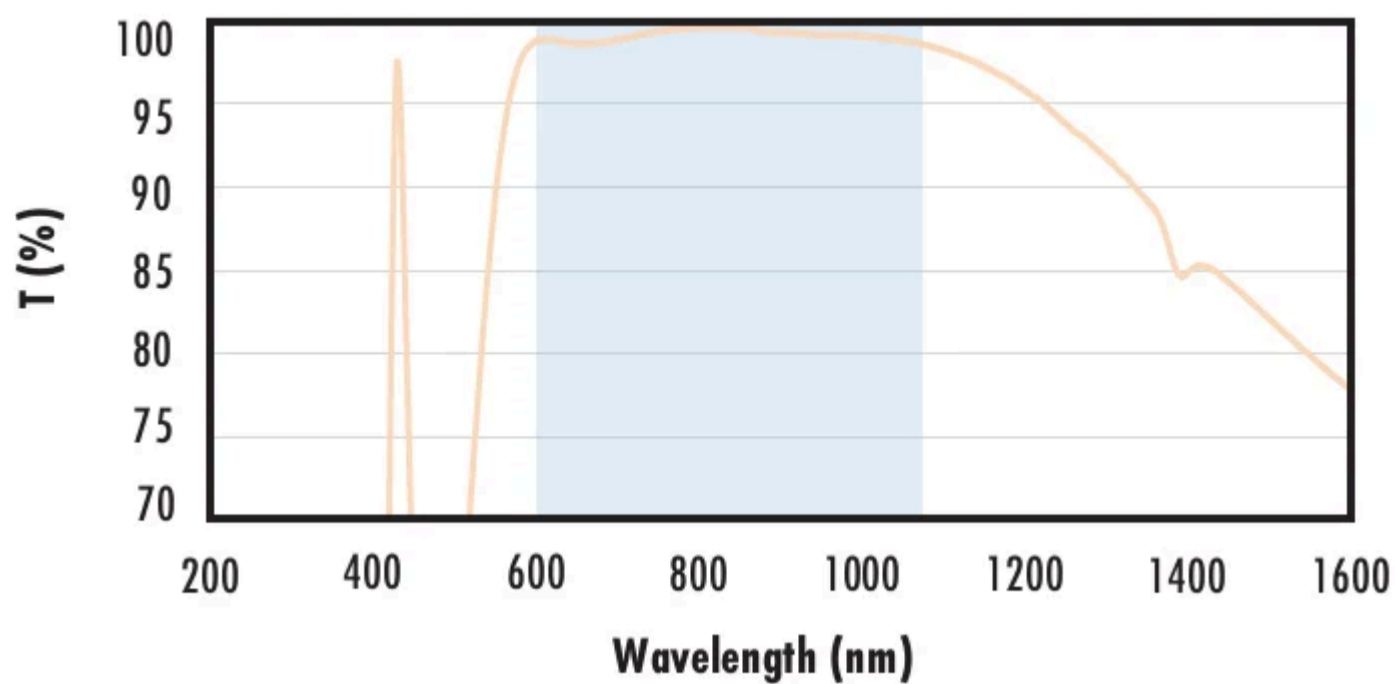
$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$

$$R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$$

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 wind with NIR I (600 – 1050nm) coating at 0° AOI.

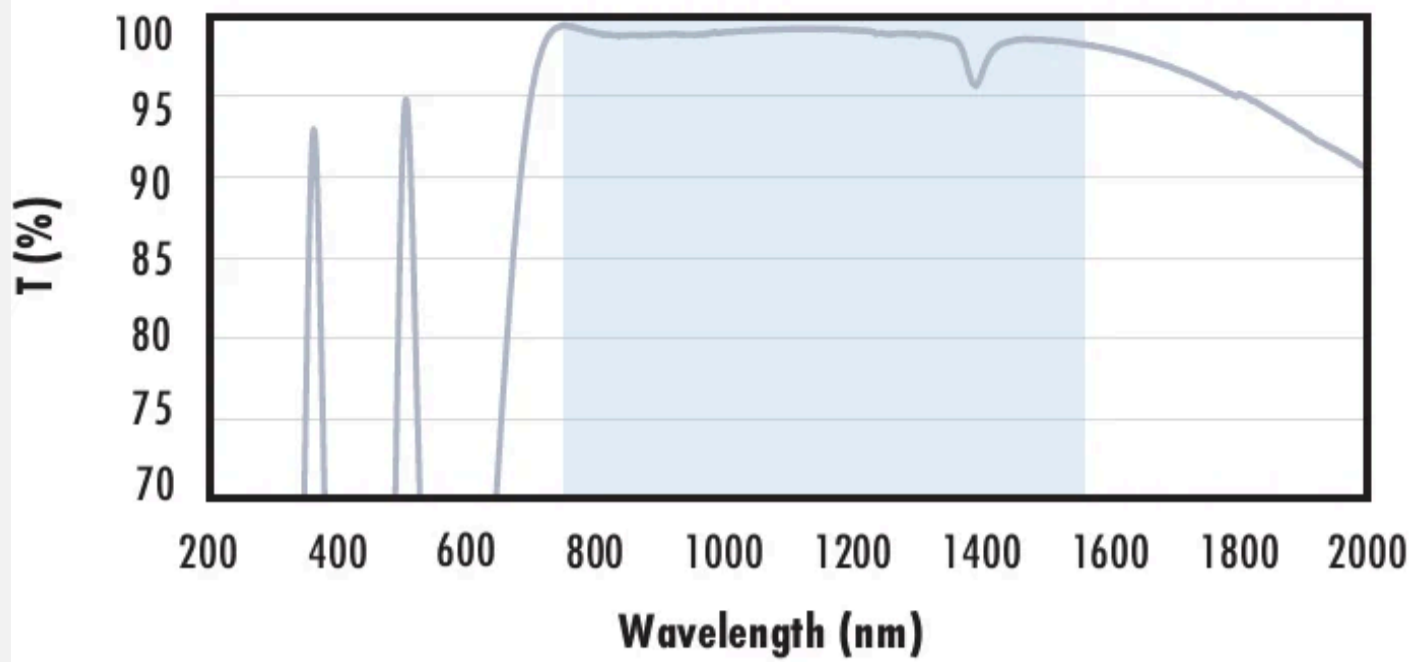
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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](#)

Related Products



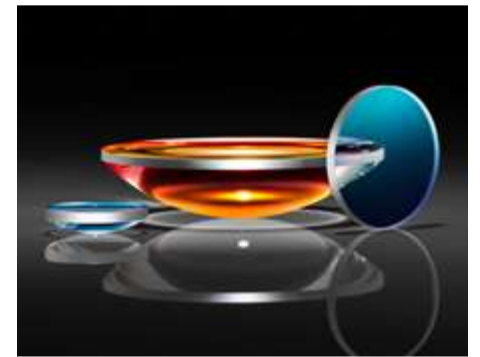
Uncoated Plano-Concave (PCV) Lenses



UV Fused Silica Double-Concave (DCV) Lenses

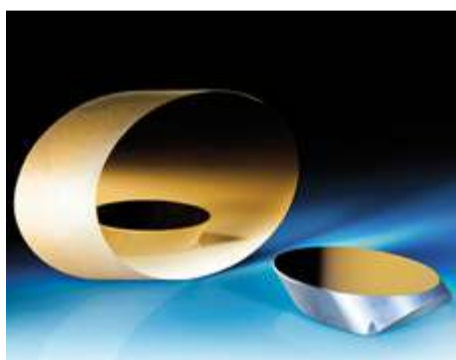


Uncoated Double-Concave (DCV) Lenses



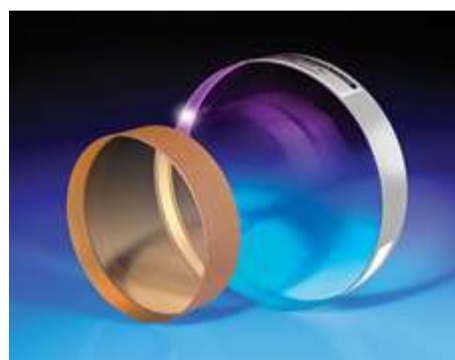
UV Fused Silica Plano-Convex (PCX) Lenses - Uncoated

Frequently Purchased Together



#32-088 - Elliptical Mirror 38.1mm Minor Axis Protected Gold
C\$249.20

Qty



#32-195-000 - 25.4mm Dia. $\lambda/10$ ZERODUR® Optical Flat
C\$224.00

Qty



#32-549 - 25mm, Uncoated, High Tolerance N-BK7 Right Angle Prism
C\$163.80

Qty



#32-595 - 10.4" Diameter, 8.0" FL, Aspheric Fresnel Lens
C\$208.60

Qty

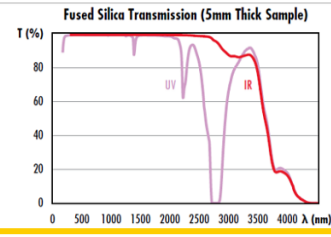
Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	25.0/25.4mm Optic Dia., SM1 Thin Mount, M4	Fixed		#13-787	C\$29.40 Request Quote	4 In Stock <input type="text" value="1"/>



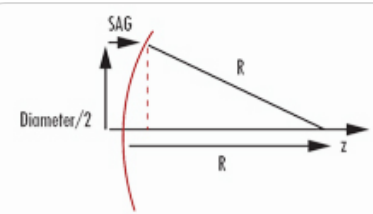
APPLICATION NOTE

Lens Geometry Performance Comparison



APPLICATION NOTE

UV vs. IR Grade Fused Silica



TECHNICAL TOOL

SAG Calculator

[View More](#)