

TECHSPEC[®] 50mm Dia. x 75mm FL UV-AR Coated, UV Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock #67-218 14 In Stock

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1

+

C\$484⁴⁰

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Volume Pricing	
Qty 1-5	C\$484.40 each
Qty 6-25	C\$387.80 each
Qty 26-49	C\$362.60 each
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General

Plano-Convex Lens

Type:

Physical & Mechanical Properties

50.00 +0.0/-0.025

Diameter (mm):

<1	Centering (arcmin):
12.50 ±0.10	Center Thickness CT (mm):
1.72	Edge Thickness ET (mm):
49	Clear Aperture CA (mm):
Protective as needed	Bevel:

Optical Properties

75.00 @ 587.6nm	Effective Focal Length EFL (mm):
66.43	Back Focal Length BFL (mm):
UV-AR (250-425nm)	Coating:
R _{abs} ≤1.0% @ 250 - 425nm R _{avg} ≤0.75% @ 250 - 425nm R _{avg} ≤0.5% @ 370 - 420nm	Coating Specification:
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 (%):
34.39	Radius R ₁ (mm):
1.5	f/#:
0.33	Numerical Aperture NA:
250 - 425	Wavelength Range (nm):
3 J/cm ² @ 355nm, 10ns	Damage Threshold, Reference: □

Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

Product Details

- AR Coated to Provide <0.75% Reflection per Surface for 250 - 425nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF₂](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses UV-AR Coated 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 UV-AR Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are UV-AR coated to increase their coating performance in the ultraviolet region.

Technical Information

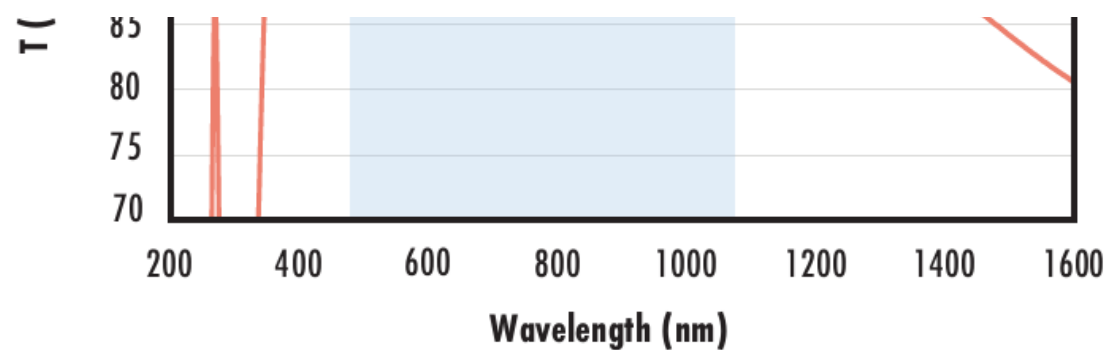


UV FS Transmission Curve



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

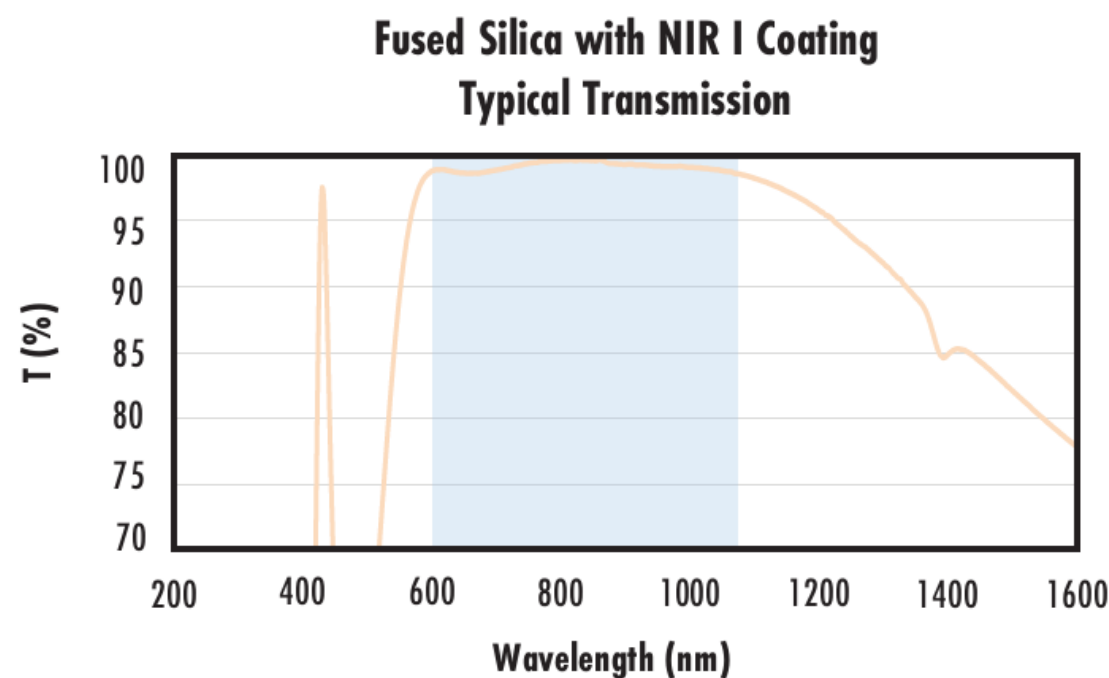
	VIS (250-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 1.0\%$ @ 350 - 450nm $R_{avg} \leq 1.5\%$ @ 250 - 700nm Data outside this range is not guaranteed and is for reference only. Click Here to Download 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 $R_{avg} \leq 0.25\%$ @ 500 - 1100nm



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

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

[Click Here to Download Data](#)



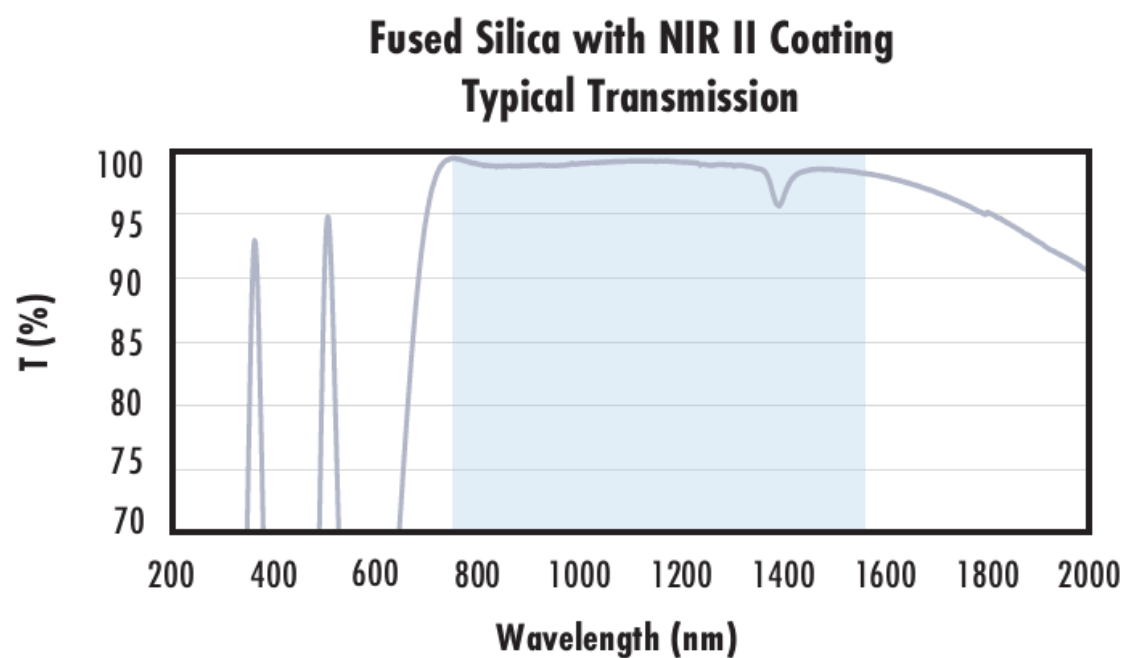
Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

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](#)



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:

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

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

[Click Here to Download Data](#)

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

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Compatible Mounts