

[See all 14 Products in Family](#)

TECHSPEC[®] 12mm Dia. x -30mm FL, UV-AR Coated, UV DCV Lens



UV Fused Silica Plano-Concave (PCV) Lenses



Stock **#48-059** 5 In Stock

☐ [Other Coating Options](#)

-

1

+

₹11,366

ADD TO CART

Volume Pricing	
Qty 1-5	₹11,366 each
Qty 6-25	₹9,108 each
Qty 26-49	₹8,564 each
Need More?	Request Quote

Product Downloads

General	
Double-Concave Lens	Type:
Max. Flat Annulus is 0.3mm	Note:

Physical & Mechanical Properties	
12.00 +0.0/-0.025	Diameter (mm):
2.00	Center Thickness CT (mm):
±0.05	Center Thickness Tolerance (mm):
<1	Centering (arcmin):
11.0	Clear Aperture CA (mm):
3.18	Edge Thickness ET (mm):
Optical Properties	
-30.00	Effective Focal Length EFL (mm):
Fused Silica (Corning 7980)	Substrate: ☐
2.5	f/#:
0.20	Numerical Aperture NA:
UV-AR (250-425nm)	Coating:
250 - 425	Wavelength Range (nm):
-30.68	Back Focal Length BFL (mm):
R _{abs} ≤1.0% @ 250 - 425nm R _{avg} ≤0.75% @ 250 - 425nm R _{avg} ≤0.5% @ 370 - 420nm	Coating Specification:
587.6	Focal Length Specification Wavelength (nm):
±2	Focal Length Tolerance (%):
-27.81	Radius R ₁ =R ₂ (mm):
40-20	Surface Quality:
3 J/cm ² @ 355nm, 10ns	Damage Threshold, Reference: ☐
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:
Singapore	Country of Origin:
Edmund Optics India Private Limited	Imported By:

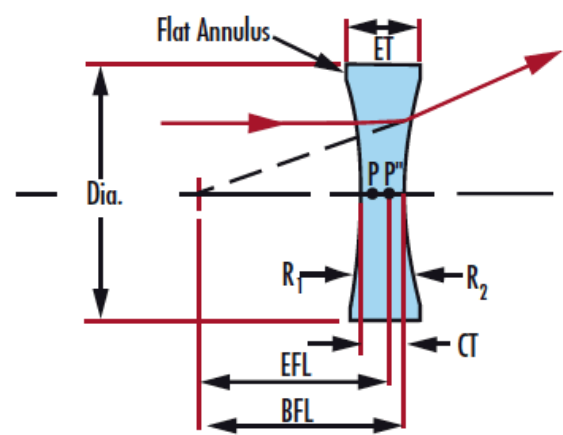
Product Details

- 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 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.

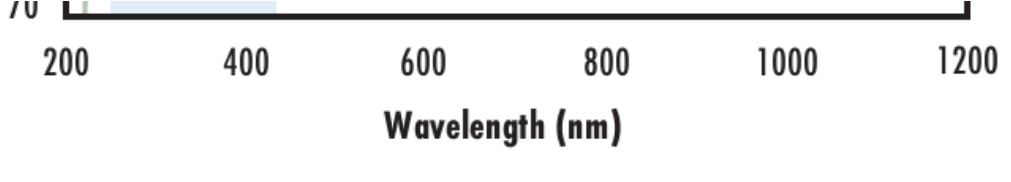
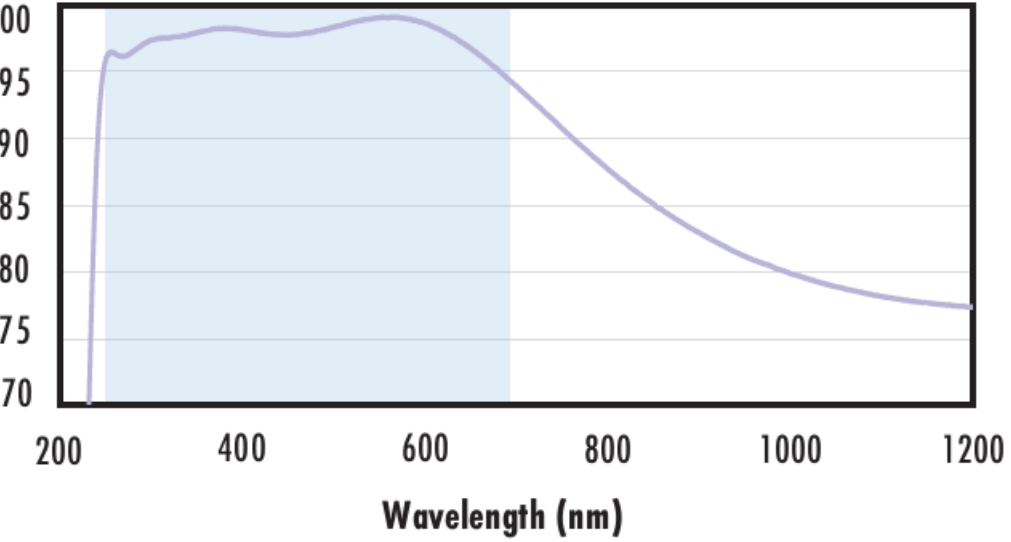
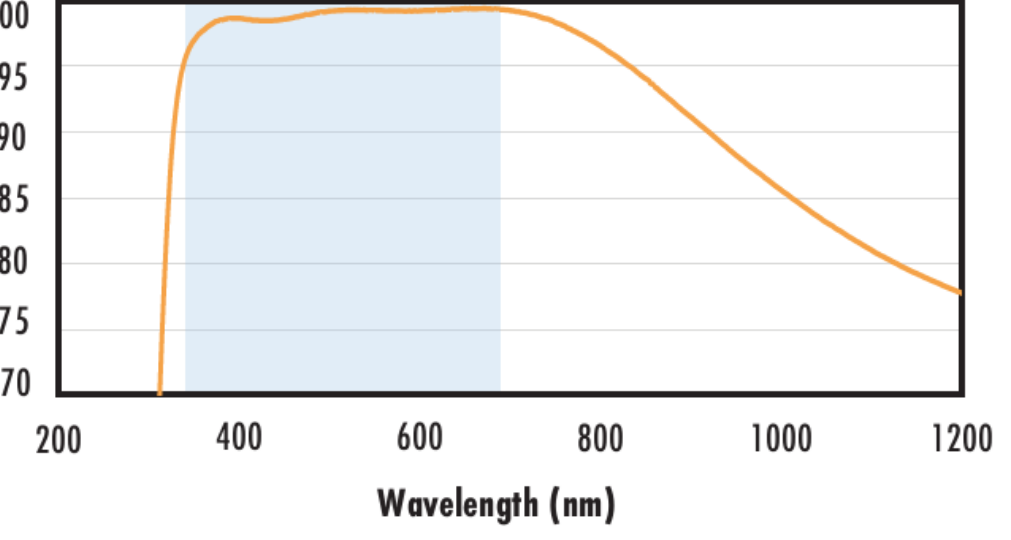
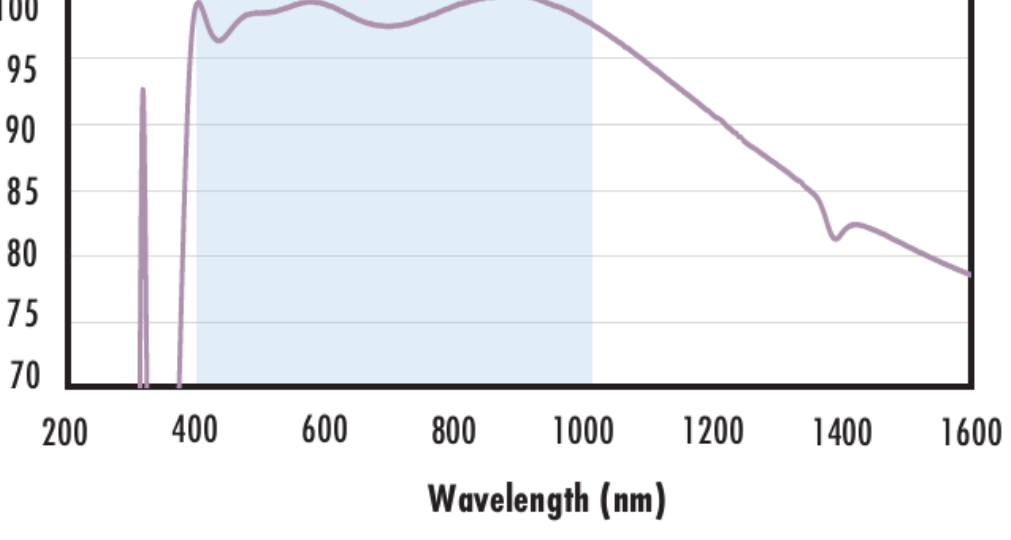
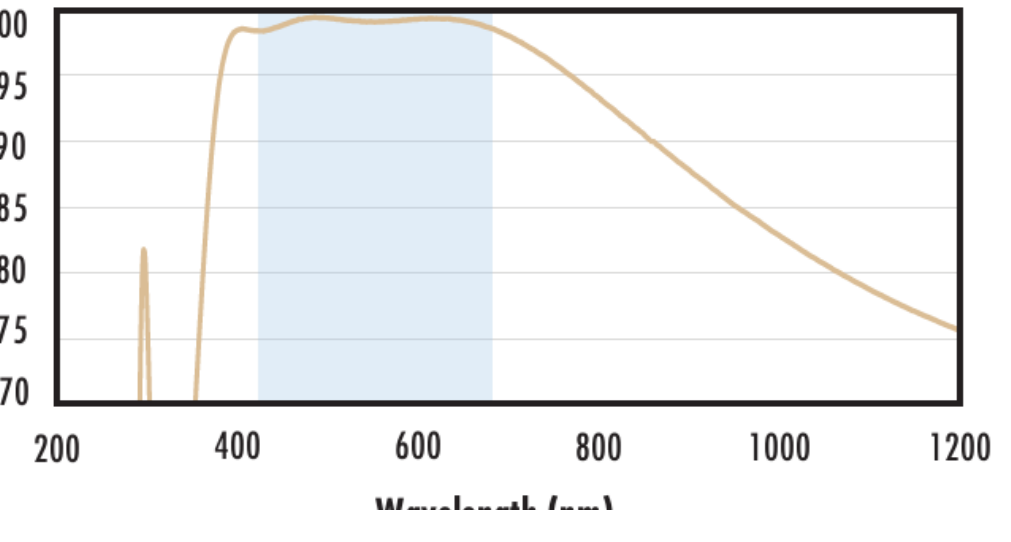
Technical Information



UV FS Transmission Curve



FUSED SILICA	
Uncoated Fused Silica Typical Transmission The graph shows the typical transmission of a 3mm thick, uncoated fused silica window. The y-axis is Transmittance T (%) from 70 to 100. The x-axis is Wavelength (nm) from 200 to 2200. The curve is relatively flat, staying above 90% transmittance across the entire range, with a small dip around 1400 nm.	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 The graph shows the typical transmission of a 3mm thick fused silica window with a MgF₂ coating. The y-axis is Transmittance T (%) from 70 to 100. The x-axis is Wavelength (nm) from 200 to 2200. A blue shaded region from 400 to 700 nm indicates the coating design wavelength range. The transmission is high (above 95%) in this range and remains high outside it, with a small dip around 1400 nm.	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 The graph shows the typical transmission of a 3mm thick fused silica window with a UV-AR coating. The y-axis is Transmittance T (%) from 70 to 100. The x-axis is Wavelength (nm) from 200 to 2200. A blue shaded region from 250 to 425 nm indicates the coating design wavelength range. The transmission is very high (above 95%) in this range and then drops significantly as the wavelength increases beyond 425 nm.	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

