

TECHSPEC<sup>®</sup> 6mm Dia. x 12mm FL UV-AR Coated, UV Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#46-256** **6 In Stock**

-

1

+

£123<sup>.45</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | £123.45 each                  |
| Qty 6-25       | £98.93 each                   |
| Qty 26-49      | £92.80 each                   |
| Need More?     | <a href="#">Request Quote</a> |

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

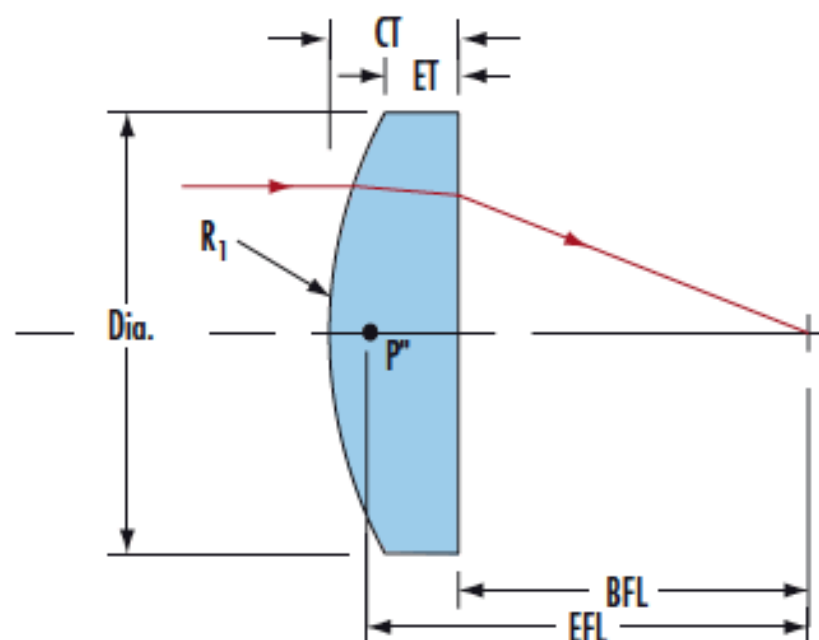
General

|                                                                                                                       |                                                       |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Plano-Convex Lens                                                                                                     | Type:                                                 |
| Physical & Mechanical Properties                                                                                      |                                                       |
| 6.00 +0.0/-0.025                                                                                                      | Diameter (mm):                                        |
| <1                                                                                                                    | Centering (arcmin):                                   |
| 2.00 ±0.05                                                                                                            | Center Thickness CT (mm):                             |
| 1.11                                                                                                                  | Edge Thickness ET (mm):                               |
| 5.4                                                                                                                   | Clear Aperture CA (mm):                               |
| Protective as needed                                                                                                  | Bevel:                                                |
| Optical Properties                                                                                                    |                                                       |
| 12.00 @ 587.6nm                                                                                                       | Effective Focal Length EFL (mm):                      |
| 10.63                                                                                                                 | Back Focal Length BFL (mm):                           |
| UV-AR (250-425nm)                                                                                                     | Coating:                                              |
| R <sub>abs</sub> ≤1.0% @ 250 - 425nm<br>R <sub>avg</sub> ≤0.75% @ 250 - 425nm<br>R <sub>avg</sub> ≤0.5% @ 370 - 420nm | Coating Specification:                                |
| Fused Silica (Corning 7980)                                                                                           | Substrate: <input type="checkbox"/>                   |
| 40-20                                                                                                                 | Surface Quality:                                      |
| 1.5λ                                                                                                                  | Power (P-V) @ 632.8nm:                                |
| λ/4                                                                                                                   | Irregularity (P-V) @ 632.8nm:                         |
| ±1                                                                                                                    | Focal Length Tolerance (%):                           |
| 5.50                                                                                                                  | Radius R <sub>1</sub> (mm):                           |
| 2                                                                                                                     | f/#:                                                  |
| 0.25                                                                                                                  | Numerical Aperture NA:                                |
| 250 - 425                                                                                                             | Wavelength Range (nm):                                |
| 3 J/cm <sup>2</sup> @ 355nm, 10ns                                                                                     | Damage Threshold, Reference: <input type="checkbox"/> |
| Regulatory Compliance                                                                                                 |                                                       |
| Compliant                                                                                                             | RoHS 2015:                                            |
| View                                                                                                                  | Certificate of Conformance:                           |
| Compliant                                                                                                             | Reach 235:                                            |

## PRODUCT DETAILS

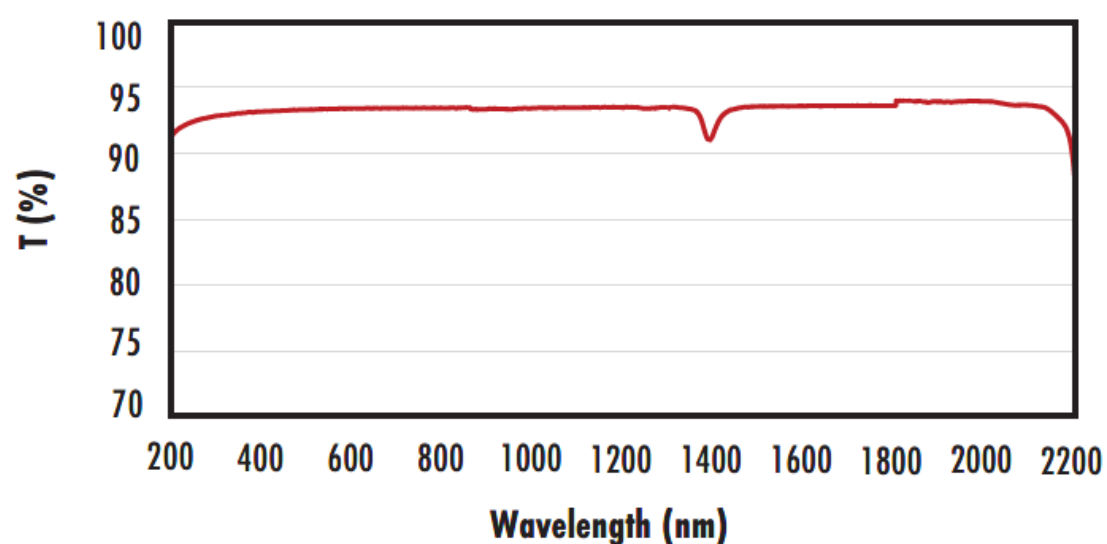
- AR Coated to Provide <0.75% Reflection per Surface for 250 - 425nm
  - Precision Fused Silica Substrate
  - Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)
- TECHSPEC® UV Fused Silica Plano-Convex (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



## FUSED SILICA

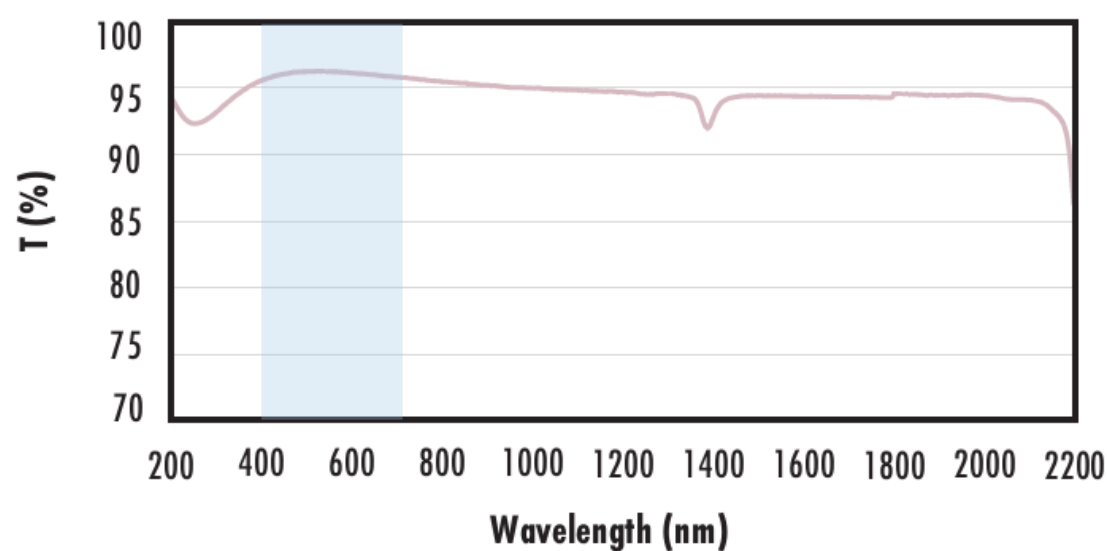
### Uncoated Fused Silica Typical Transmission



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.

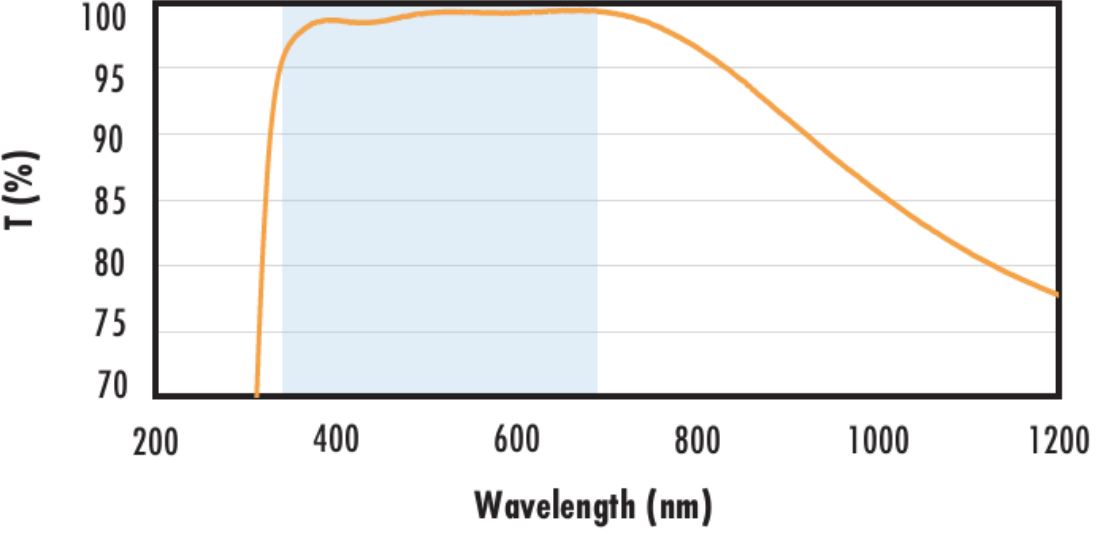
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

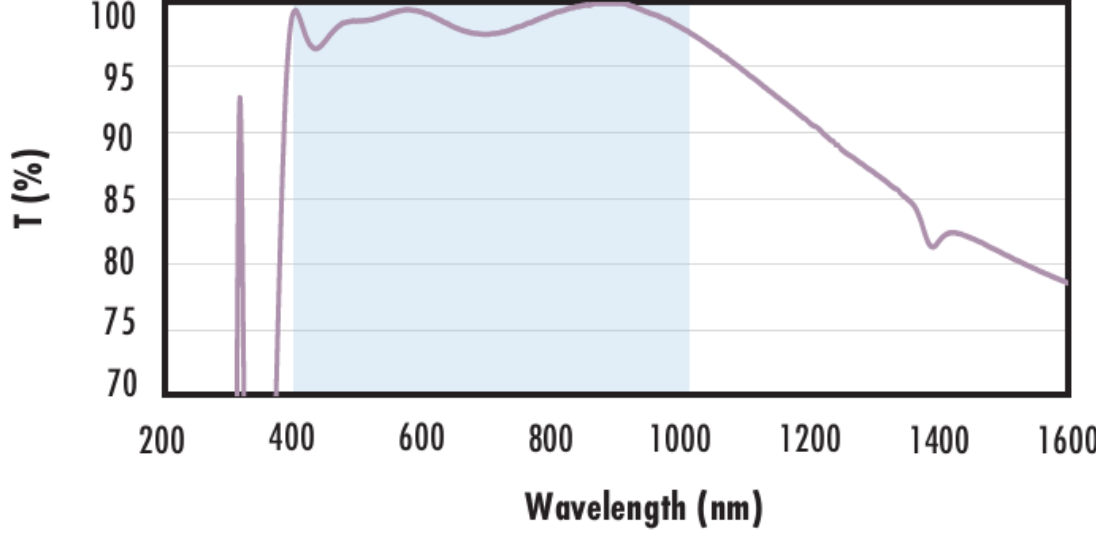
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

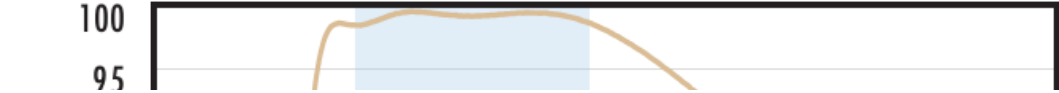
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

|                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                        | <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><math>R_{avg} \leq 0.4\%</math> @ 425 - 675nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                       |
| <p><b>Fused Silica with YAG-BBAR Coating</b></p> <p><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><math>R_{abs} \leq 0.25\%</math> @ 532nm<br/><math>R_{abs} \leq 0.25\%</math> @ 1064nm<br/><math>R_{avg} \leq 1.0\%</math> @ 500 - 1100nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>           |
| <p><b>Fused Silica with NIR I Coating</b></p> <p><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><math>R_{avg} \leq 0.5\%</math> @ 600 - 1050nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                       |
| <p><b>Fused Silica with NIR II Coating</b></p> <p><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><math>R_{abs} \leq 1.5\%</math> @ 750 - 800nm<br/><math>R_{abs} \leq 1.0\%</math> @ 800 - 1550nm<br/><math>R_{avg} \leq 0.7\%</math> @ 750 - 1550nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><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

