

TECHSPEC<sup>®</sup> 12mm Dia. x 36mm FL UV-VIS Coated, UV Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#48-817** **6 In Stock**

-

1

+

\$S\$106<sup>.79</sup>

~~\$S\$213.57~~

ADD TO CART

| Volume Pricing |                                                |
|----------------|------------------------------------------------|
| Qty 1-5        | <del>\$S\$213.57</del> <b>\$S\$106.79</b> each |
| Qty 6-25       | <del>\$S\$170.26</del> <b>\$S\$85.13</b> each  |
| Qty 26-49      | <del>\$S\$159.80</del> <b>\$S\$79.90</b> each  |
| Need More?     | <a href="#">Request Quote</a>                  |

Product Downloads

SPECIFICATIONS

General

Type:

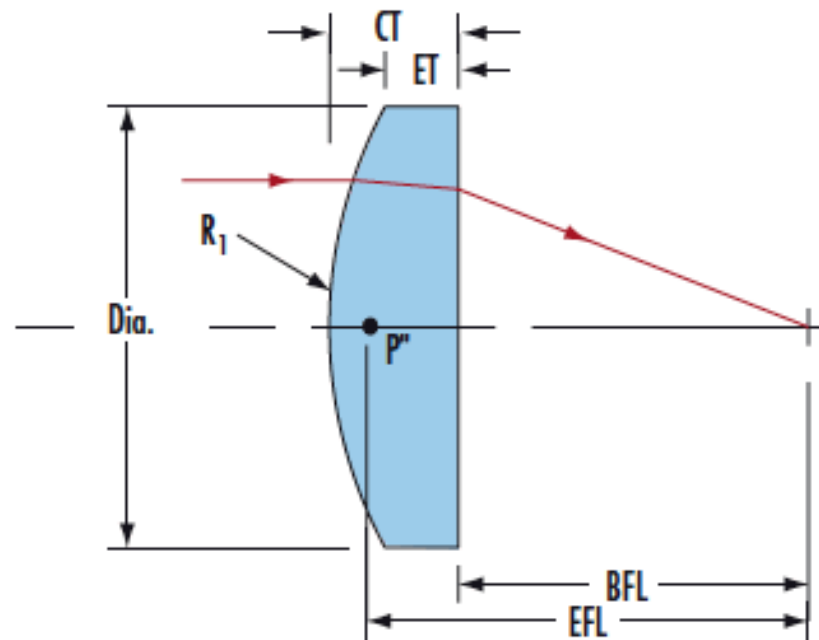
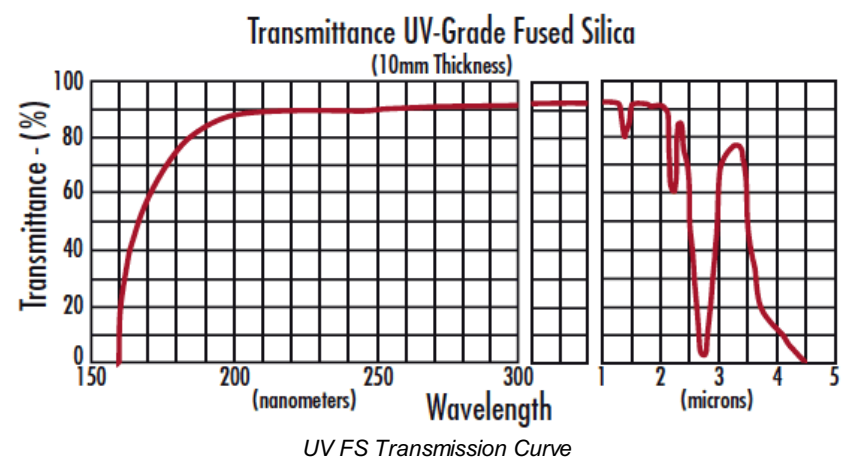
|                                                                              |                                  |
|------------------------------------------------------------------------------|----------------------------------|
| Plano-Convex Lens                                                            |                                  |
| Physical & Mechanical Properties                                             |                                  |
| 12.00 +0.0/-0.025                                                            | Diameter (mm):                   |
| <1                                                                           | Centering (arcmin):              |
| 2.50 ±0.05                                                                   | Center Thickness CT (mm):        |
| 1.37                                                                         | Edge Thickness ET (mm):          |
| 11                                                                           | Clear Aperture CA (mm):          |
| Protective as needed                                                         | Bevel:                           |
| Optical Properties                                                           |                                  |
| 36.00 @ 587.6nm                                                              | Effective Focal Length EFL (mm): |
| 34.29                                                                        | Back Focal Length BFL (mm):      |
| UV-VIS (250-700nm)                                                           | Coating:                         |
| R <sub>abs</sub> ≤1.0% @ 350 - 450nm<br>R <sub>avg</sub> ≤1.5% @ 250 - 700nm | 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 (%):      |
| 16.51                                                                        | Radius R <sub>1</sub> (mm):      |
| 3                                                                            | f#:                              |
| 0.17                                                                         | Numerical Aperture NA:           |
| 250 - 700                                                                    | Wavelength Range (nm):           |
| 3 J/cm <sup>2</sup> @ 355nm, 10ns<br>5 J/cm <sup>2</sup> @ 532nm, 10ns       | Damage Threshold, Reference: □   |
| Regulatory Compliance                                                        |                                  |
| Compliant                                                                    | RoHS 2015:                       |
| View                                                                         | Certificate of Conformance:      |
| Compliant                                                                    | Reach 235:                       |

## PRODUCT DETAILS

- AR Coated to Provide <1.5% Reflection per Surface for 250 - 700nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-AR](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

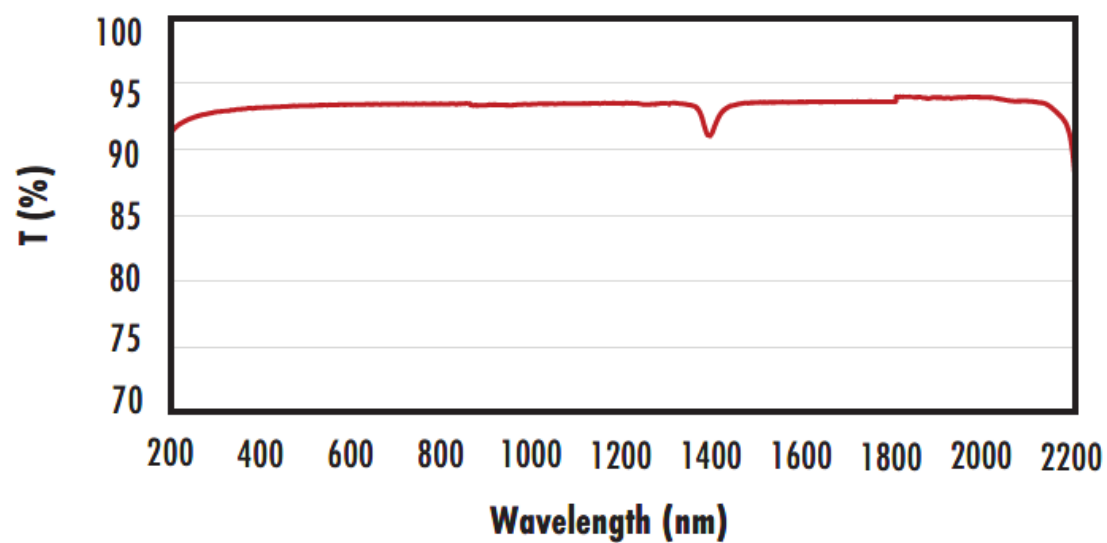
TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses UV-VIS Coated feature precision specifications and a [variety of coating options](#) on a broadband substrate. Fused Silica is commonly used in applications from the Ultraviolet (UV) through the Near-Infrared (NIR). Its low index of refraction, low 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-VIS Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are UV-VIS coated to increase their coating performance in the ultraviolet and visible region.

## TECHNICAL INFORMATION



## FUSED SILICA

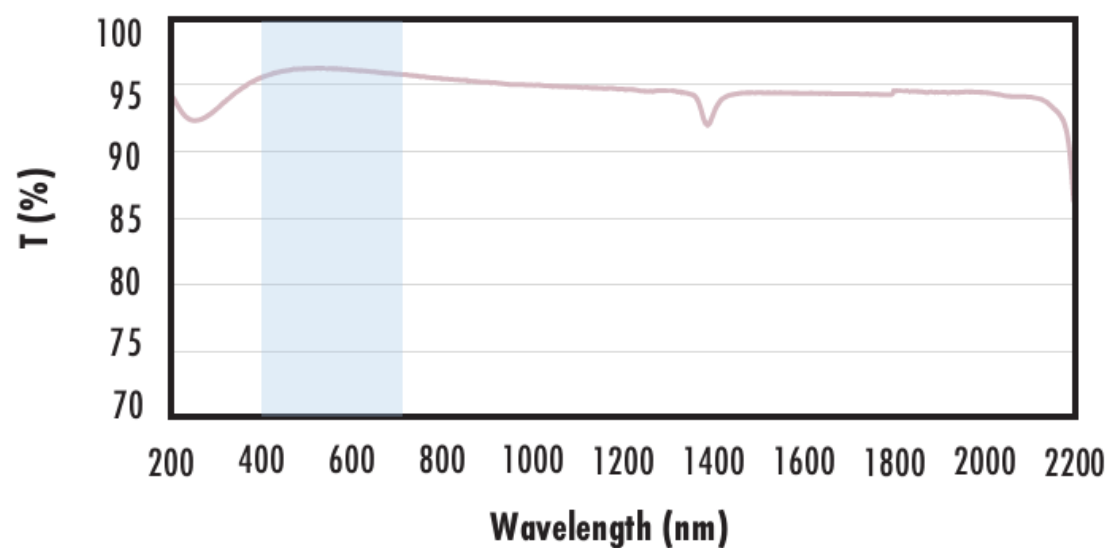
### Uncoated Fused Silica Typical Transmission



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.

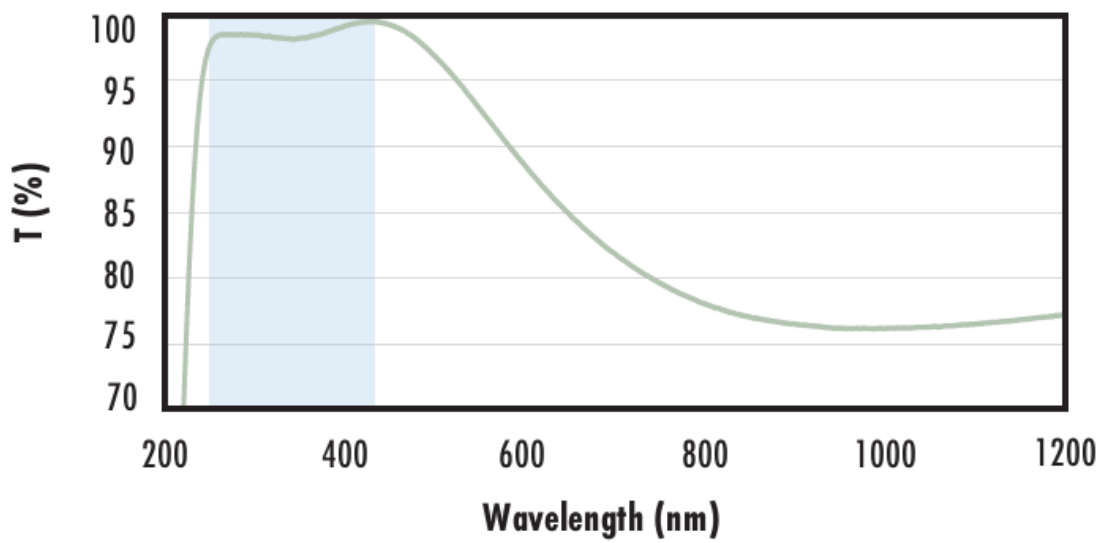
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

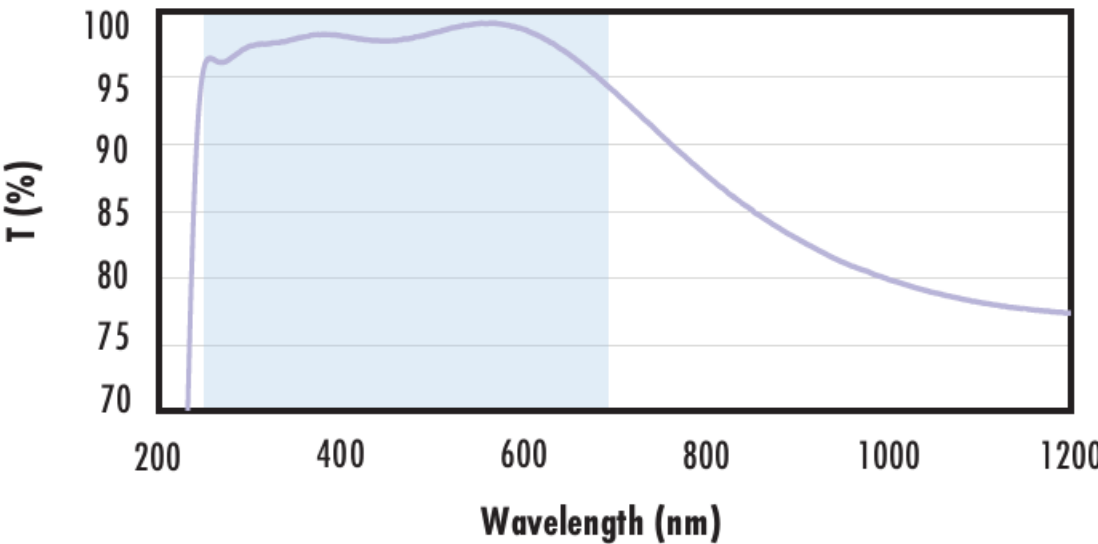
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 1.0\% @ 250 - 425\text{nm}$   
 $R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$   
 $R_{avg} \leq 0.5\% @ 370 - 420\text{nm}$

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.

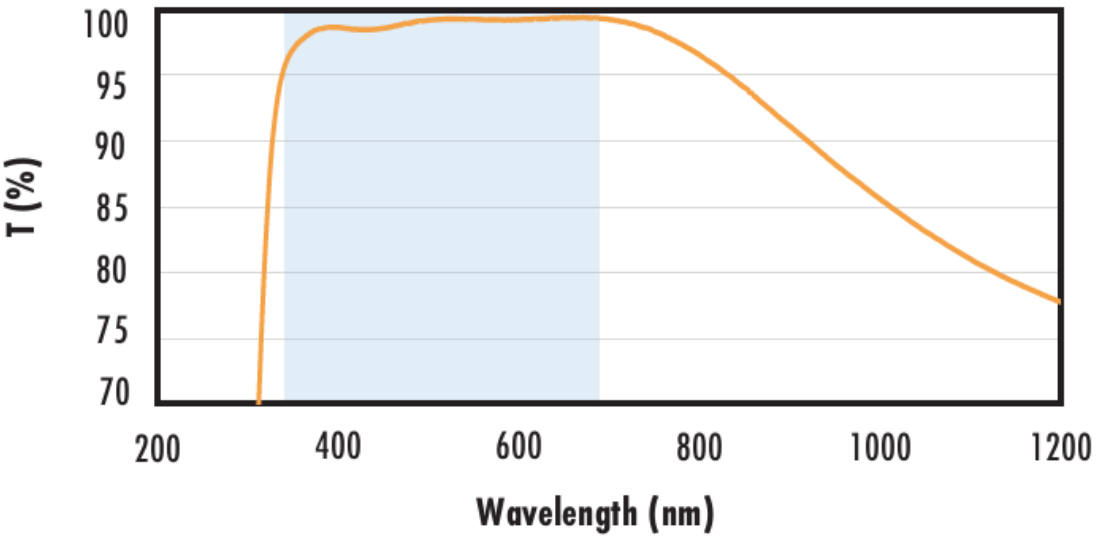
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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.

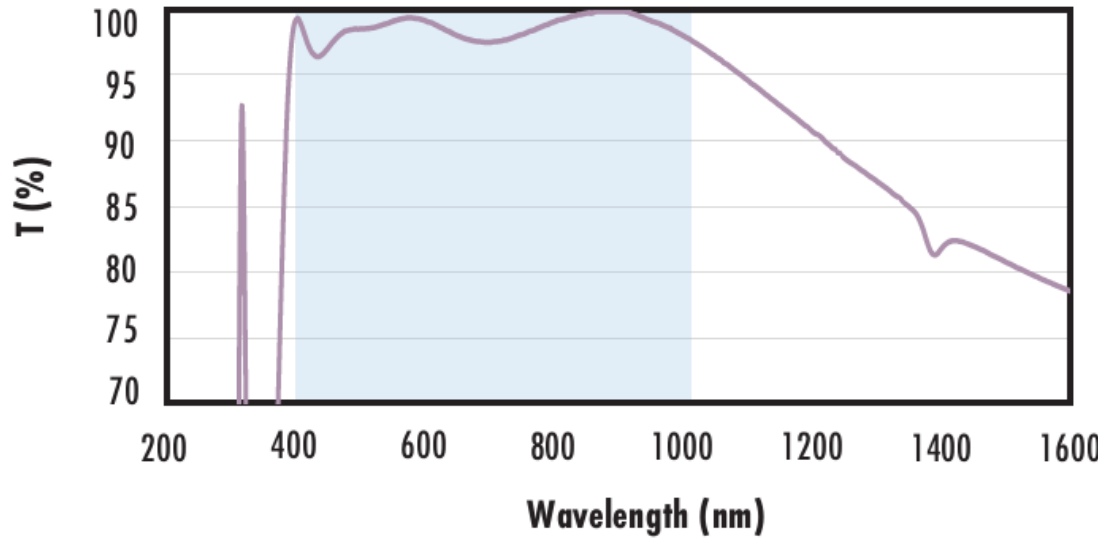
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

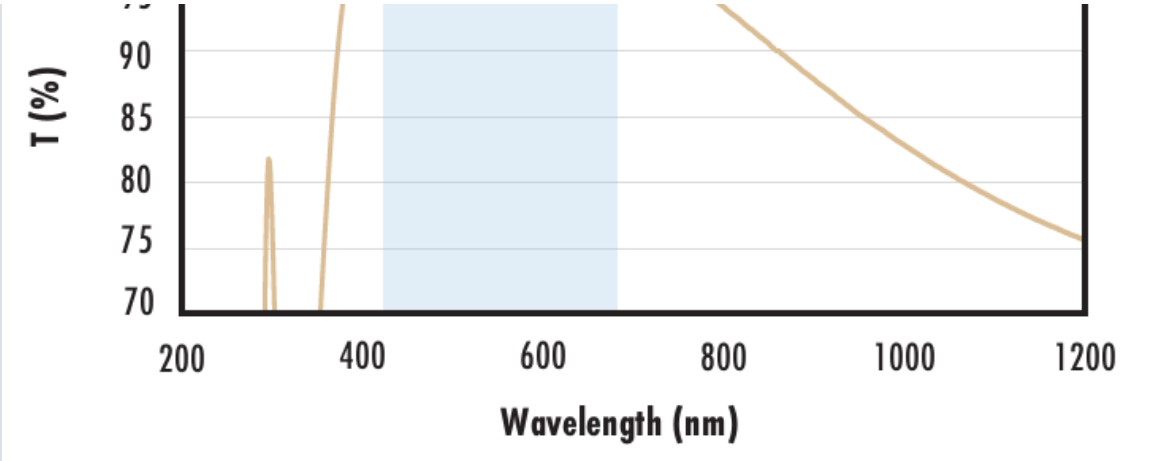
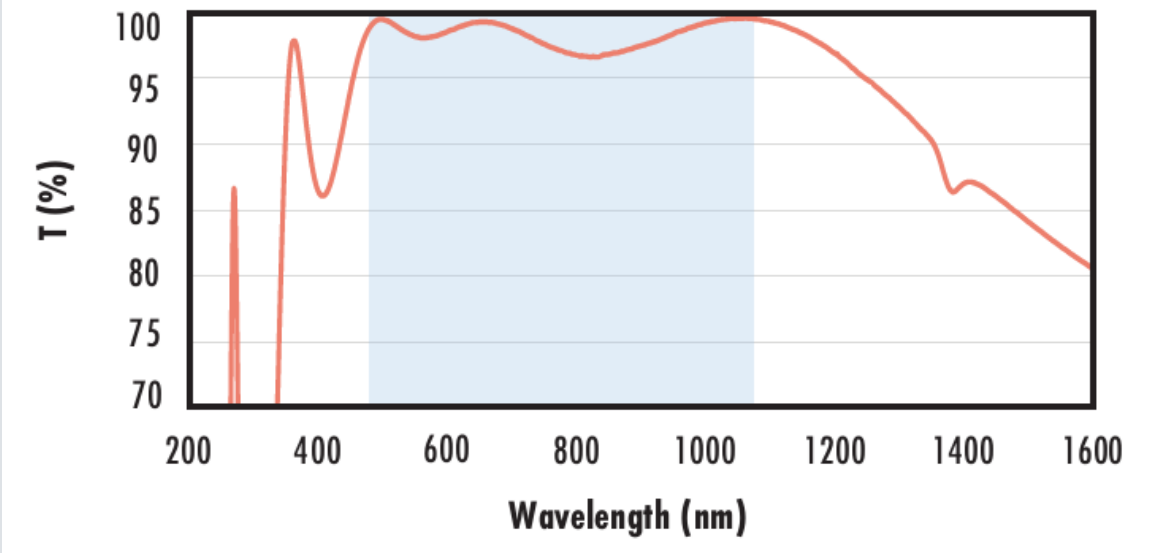
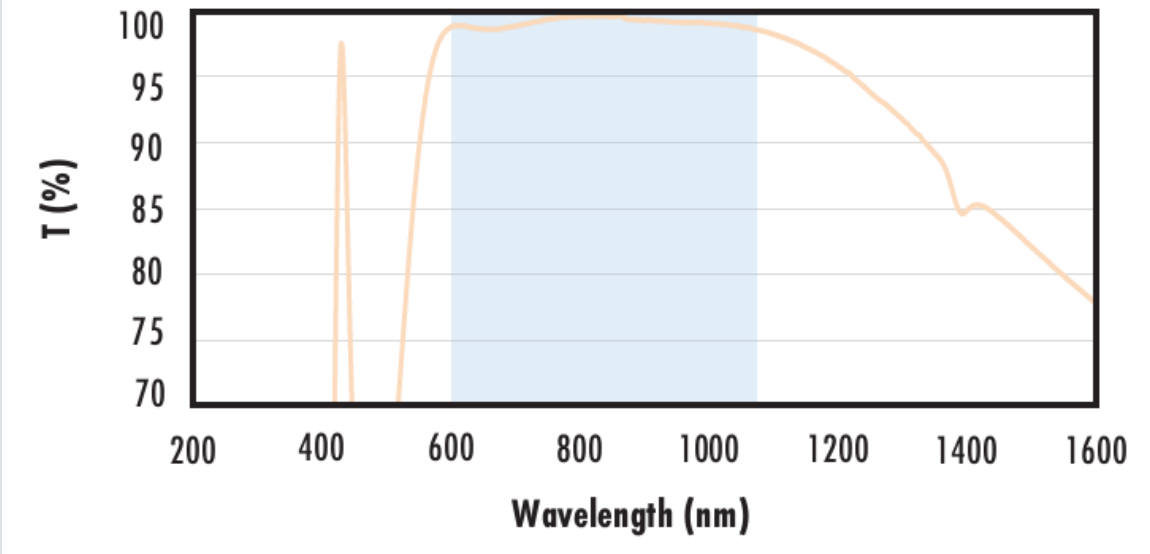
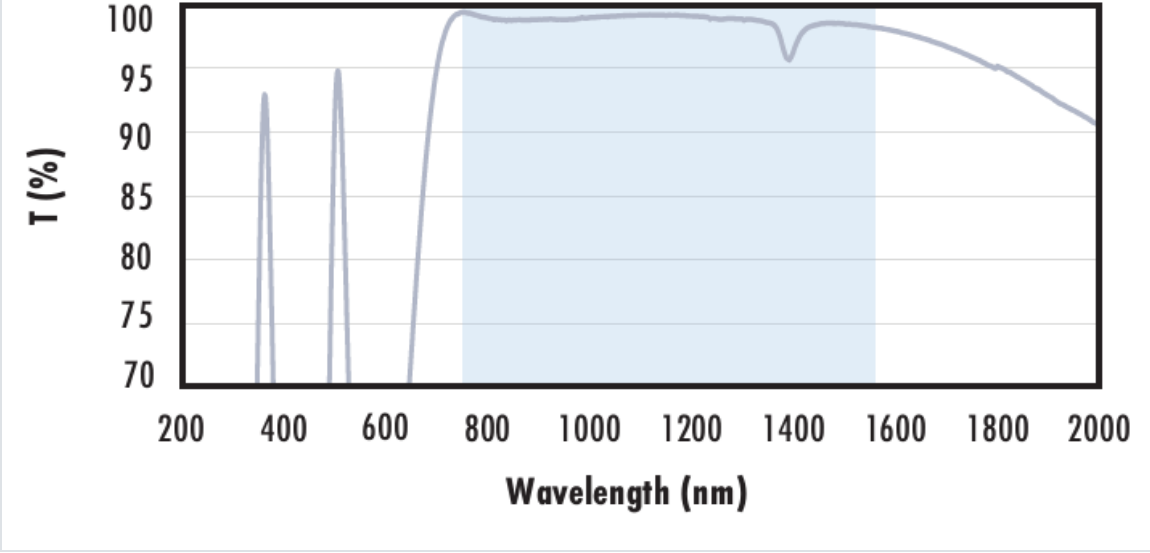
Data outside this range is not guaranteed and is for reference only.

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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

