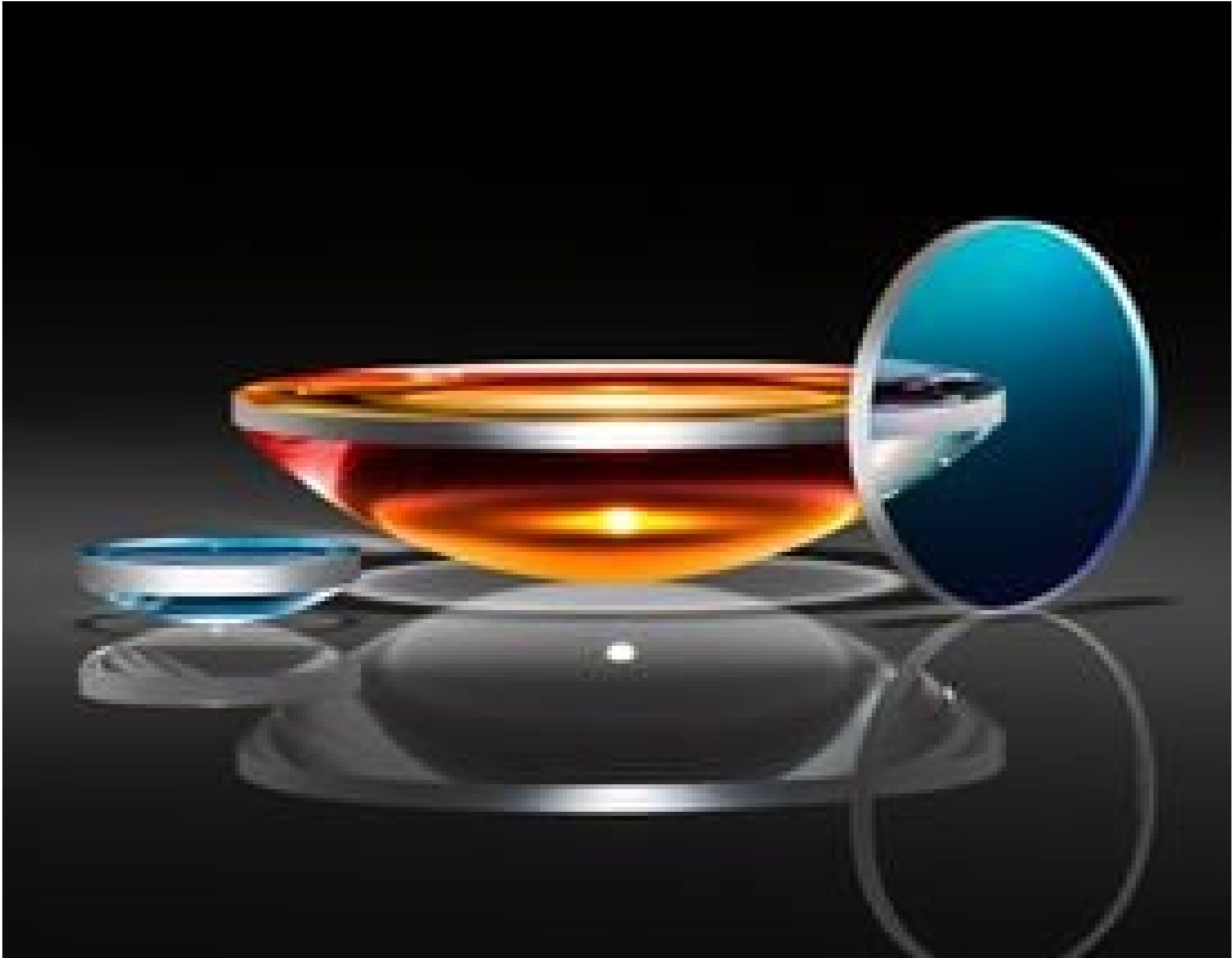


TECHSPEC<sup>®</sup> 12mm Dia. x 30mm FL, VIS-EXT Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#18-047** 5 In Stock

-

1

+

€157<sup>.00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €157,00 each                  |
| Qty 6-25       | €125,00 each                  |
| Qty 26-49      | €117,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Plano-Convex Lens

Type:

Physical & Mechanical Properties

|                      |                           |
|----------------------|---------------------------|
| 12.00 -0.025         | Diameter (mm):            |
| <1                   | Centering (arcmin):       |
| 3.55 ±0.05           | Center Thickness CT (mm): |
| 2.17                 | Edge Thickness ET (mm):   |
| 11                   | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Optical Properties                   |                                  |
| 30.00 @ 587.6nm                      | Effective Focal Length EFL (mm): |
| 27.56                                | Back Focal Length BFL (mm):      |
| VIS-EXT (350-700nm)                  | Coating:                         |
| R <sub>avg</sub> <0.5% @ 350 - 700nm | Coating Specification:           |
| Fused Silica (Corning 7980)          | Substrate: □                     |
| 40-20                                | Surface Quality:                 |
| 3 Rings                              | Power (P-V) @ 632.8nm:           |
| 0.5 Rings                            | Irregularity (P-V) @ 632.8nm:    |
| ±1                                   | Focal Length Tolerance (%):      |
| 13.75                                | Radius R <sub>1</sub> (mm):      |
| 2.5                                  | f/#:                             |
| 0.20                                 | Numerical Aperture NA:           |
| 350 - 700                            | Wavelength Range (nm):           |
| 5 J/cm <sup>2</sup> @ 532nm, 10ns    | Damage Threshold, By Design: □   |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |
| Compliant             | Reach 235:                  |

## 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

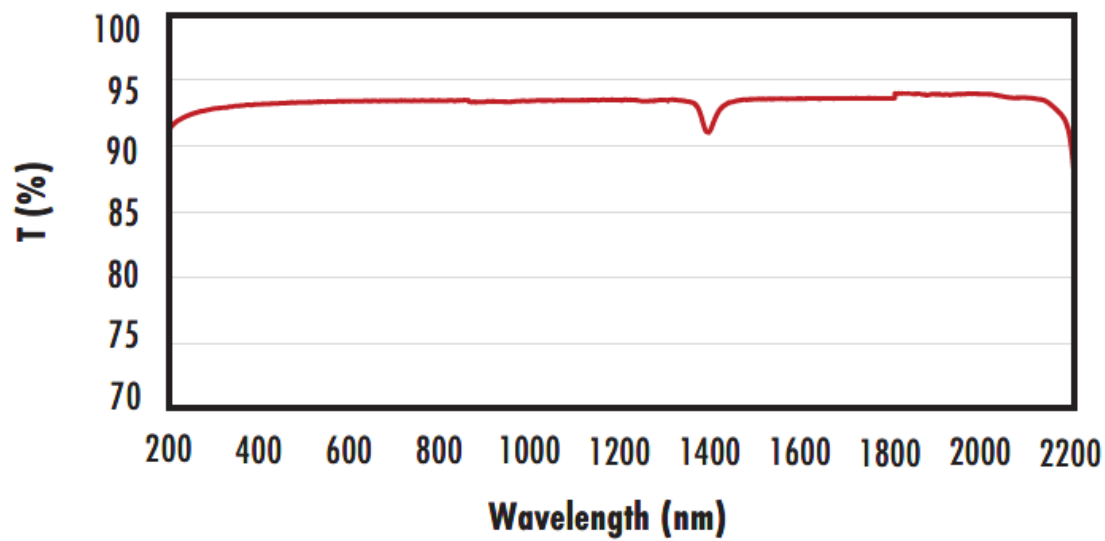
- AR Coated to Provide <0.5% Reflection per Surface for 350 - 700nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-AR](#), [UV-VIS](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

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

Technical Information

FUSED SILICA

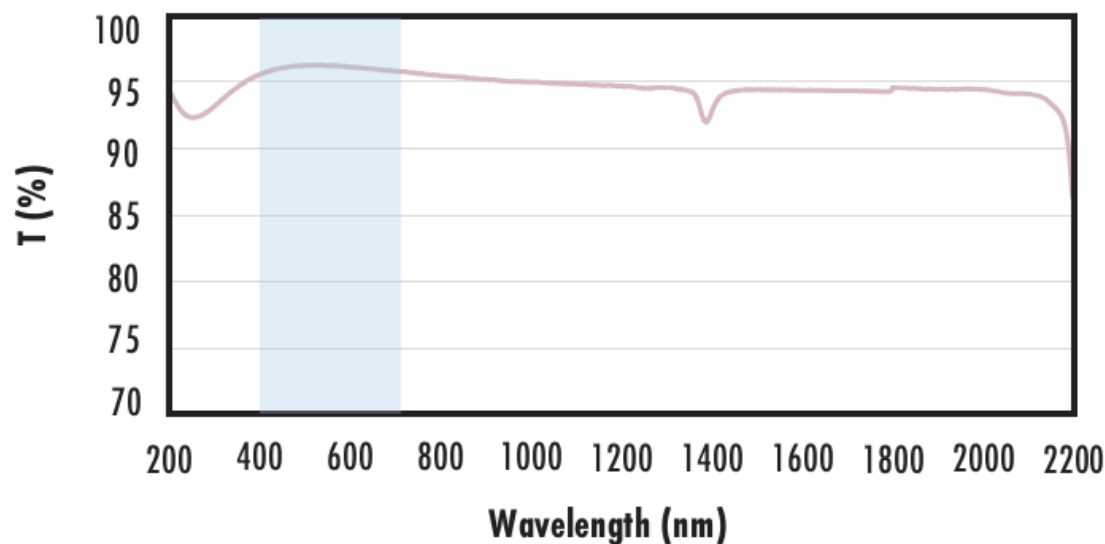
Uncoated Fused Silica  
Typical Transmission



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.

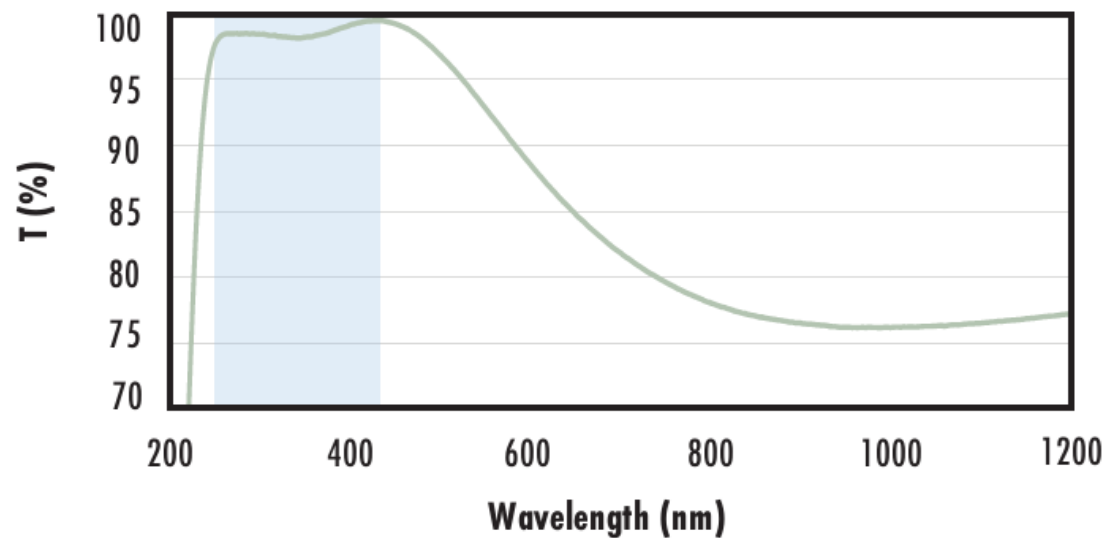
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

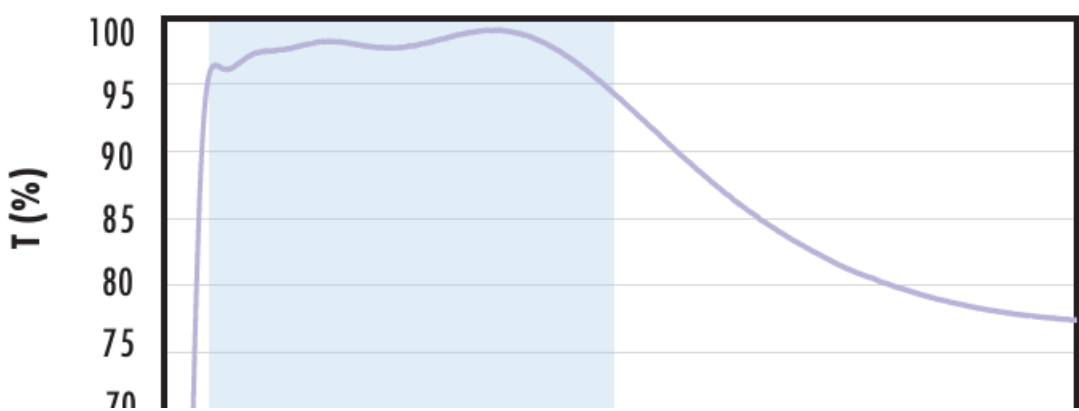
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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



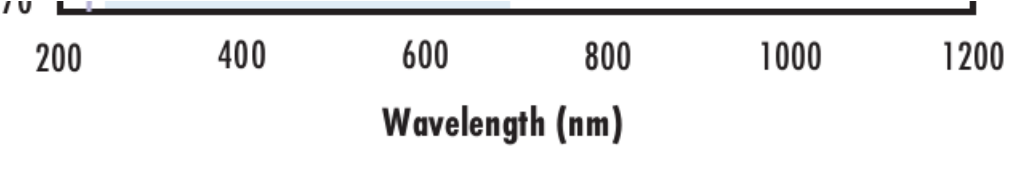
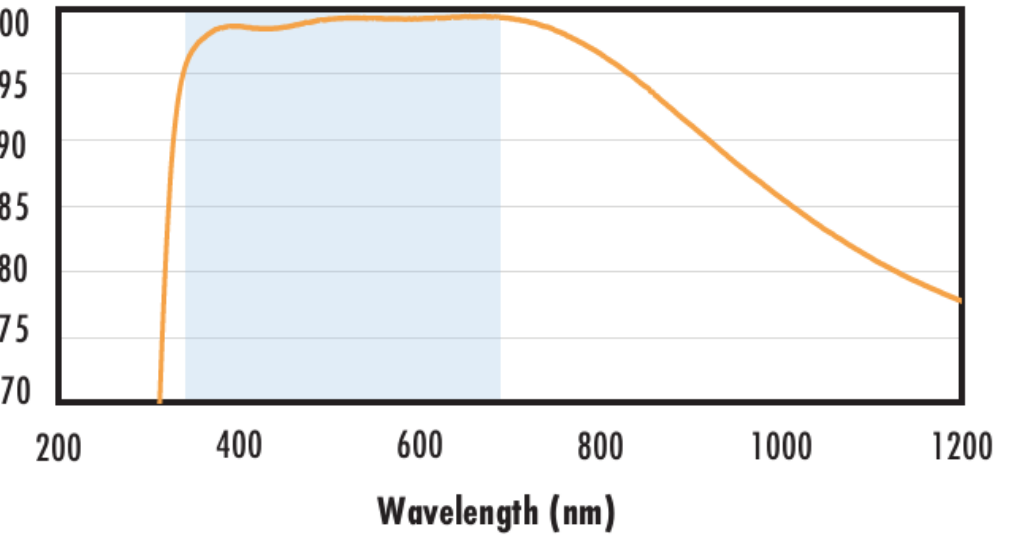
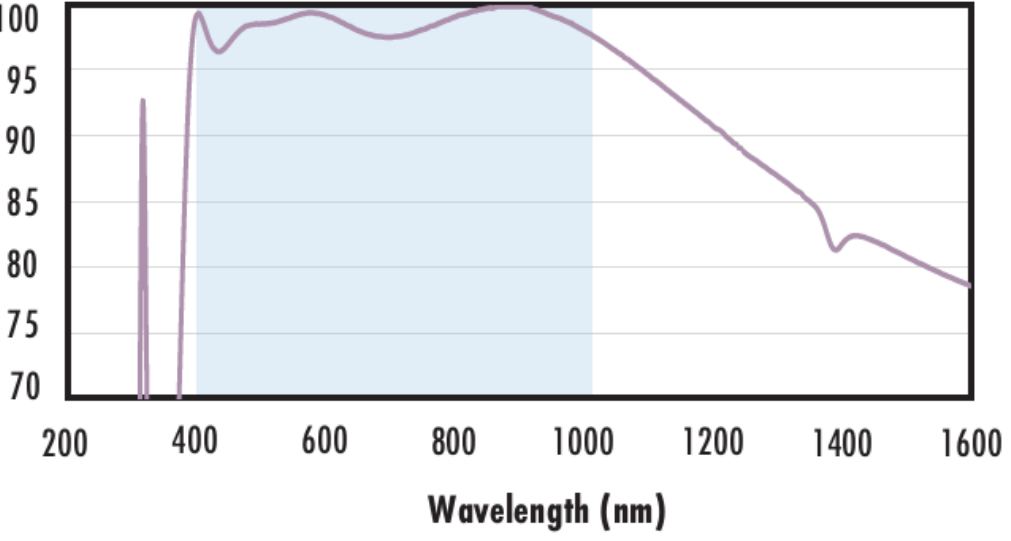
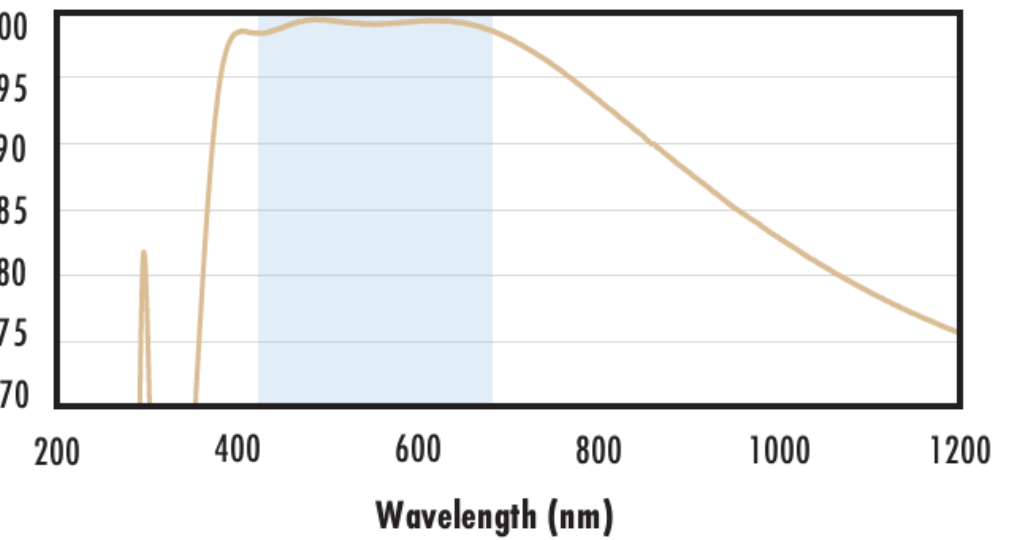
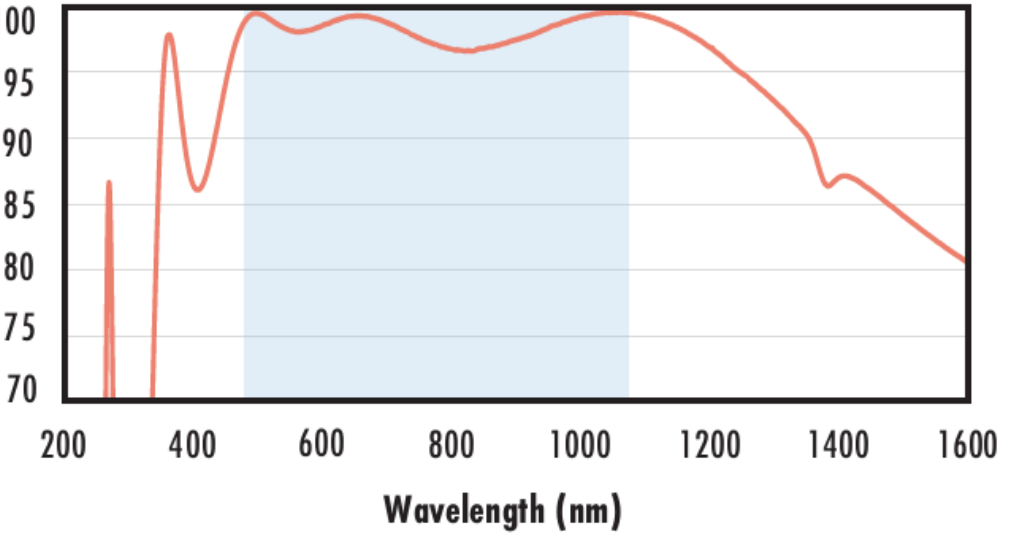
Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.

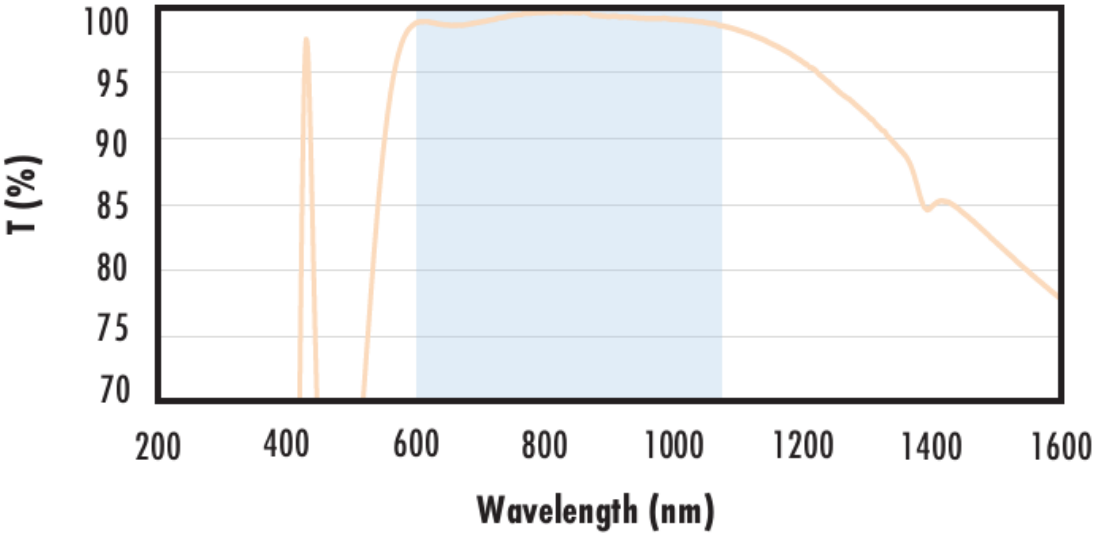
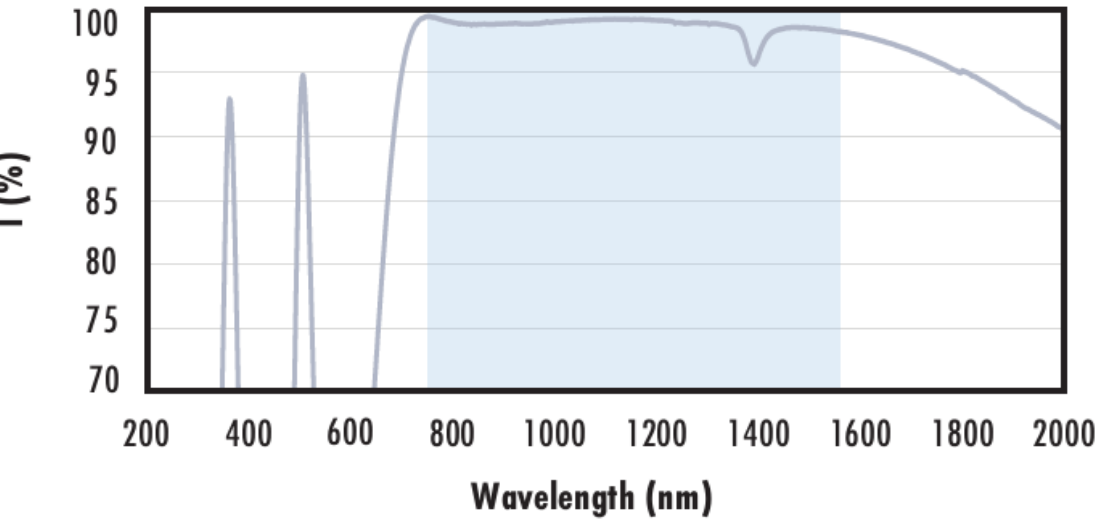
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

|                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p data-bbox="569 255 1079 359"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1346 439 1839 486">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1335 501 1850 549">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 563 1707 587"><math>R_{avg} \leq 0.5\% @ 350 - 700\text{nm}</math></p> <p data-bbox="1346 602 1839 649">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 664 1711 688"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                  |
| <p data-bbox="573 931 1075 1035"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1346 1077 1839 1124">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1335 1139 1850 1187">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1493 1202 1692 1225"><math>R_{abs} \leq 0.25\% @ 880\text{nm}</math></p> <p data-bbox="1472 1228 1713 1252"><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math></p> <p data-bbox="1467 1255 1717 1279"><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></p> <p data-bbox="1346 1311 1839 1359">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 1374 1711 1397"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="569 1602 1079 1706"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1335 1783 1850 1831">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1335 1846 1850 1893">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 1908 1707 1932"><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p data-bbox="1346 1947 1839 1994">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 2009 1711 2033"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                         |
| <p data-bbox="548 2273 1100 2377"><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1346 2427 1839 2475">Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1335 2490 1850 2537">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1493 2552 1692 2576"><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math></p> <p data-bbox="1493 2579 1692 2602"><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math></p> <p data-bbox="1472 2605 1713 2629"><math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p data-bbox="1346 2644 1839 2691">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 2706 1711 2730"><a href="#">Click Here to Download Data</a></p>      |

|                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div><div>Fused Silica with NIR I Coating</div><div>Typical Transmission</div><div></div></div></div>   | <div><div>Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><div><math>R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}</math></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div>                                                                                                                                       |
| <div><div><div>Fused Silica with NIR II Coating</div><div>Typical Transmission</div><div></div></div></div> | <div><div>Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div><div><div><math>R_{abs} \leq 1.5\% \text{ @ } 750 - 800\text{nm}</math><br/><math>R_{abs} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}</math><br/><math>R_{avg} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}</math></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div> |