

TECHSPEC<sup>®</sup> 6mm Dia. x 15mm FL, NIR I Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock #18-115 11 In Stock

-

1

+

₹10,354

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| Volume Pricing |                               |
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| Qty 1-5        | ₹10,354 each                  |
| Qty 6-25       | ₹8,252 each                   |
| Qty 26-49      | ₹7,785 each                   |
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General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

6.00 -0.025

|                      |                           |
|----------------------|---------------------------|
| <1                   | Centering (arcmin):       |
| 2.00 ±0.05           | Center Thickness CT (mm): |
| 1.31                 | Edge Thickness ET (mm):   |
| 5                    | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                                       |                                  |
|---------------------------------------|----------------------------------|
| Optical Properties                    |                                  |
| 15.00 @ 587.6nm                       | Effective Focal Length EFL (mm): |
| 13.63                                 | Back Focal Length BFL (mm):      |
| NIR I (600-1050nm)                    | Coating:                         |
| R <sub>avg</sub> ≤0.5% @ 600 - 1050nm | 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 (%):      |
| 6.88                                  | Radius R <sub>1</sub> (mm):      |
| 2.5                                   | f/#:                             |
| 0.20                                  | Numerical Aperture NA:           |
| 600 - 1050                            | Wavelength Range (nm):           |
| 7 J/cm <sup>2</sup> @ 1064nm, 10ns    | Damage Threshold, Reference: □   |

|                                     |                             |
|-------------------------------------|-----------------------------|
| Regulatory Compliance               |                             |
| Compliant                           | RoHS 2015:                  |
| View                                | Certificate of Conformance: |
| Compliant                           | Reach 235:                  |
| Japan                               | Country of Origin:          |
| Edmund Optics India Private Limited | Imported By:                |

## 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](#).

## Product Details

- AR Coated to Provide <0.5% Reflection per Surface for 600 - 1050nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), and [NIR II](#)

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses NIR I 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 NIR I Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are NIR I coated to increase their coating performance in the 600nm to 1050nm range.

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:

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

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:

$$R_{abs} \leq 1.0\% \text{ @ } 250 - 425\text{nm}$$

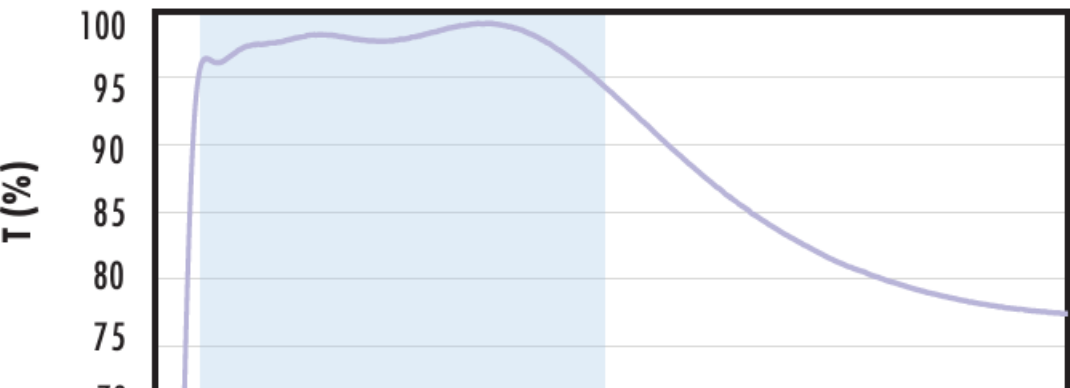
$$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$$

$$R_{avg} \leq 0.5\% \text{ @ } 370 - 420\text{nm}$$

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.

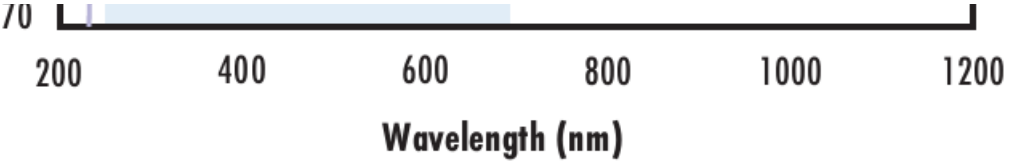
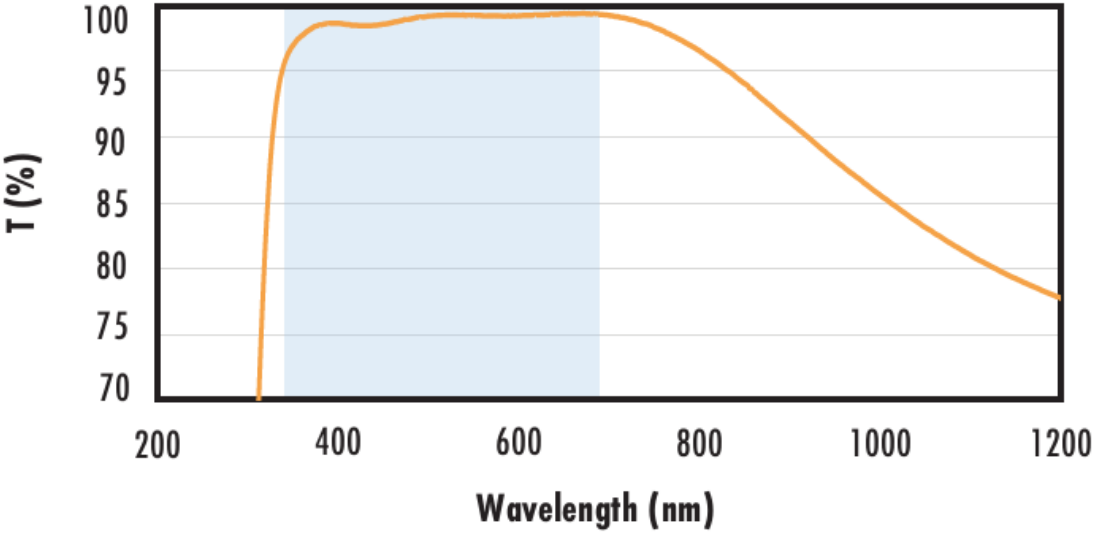
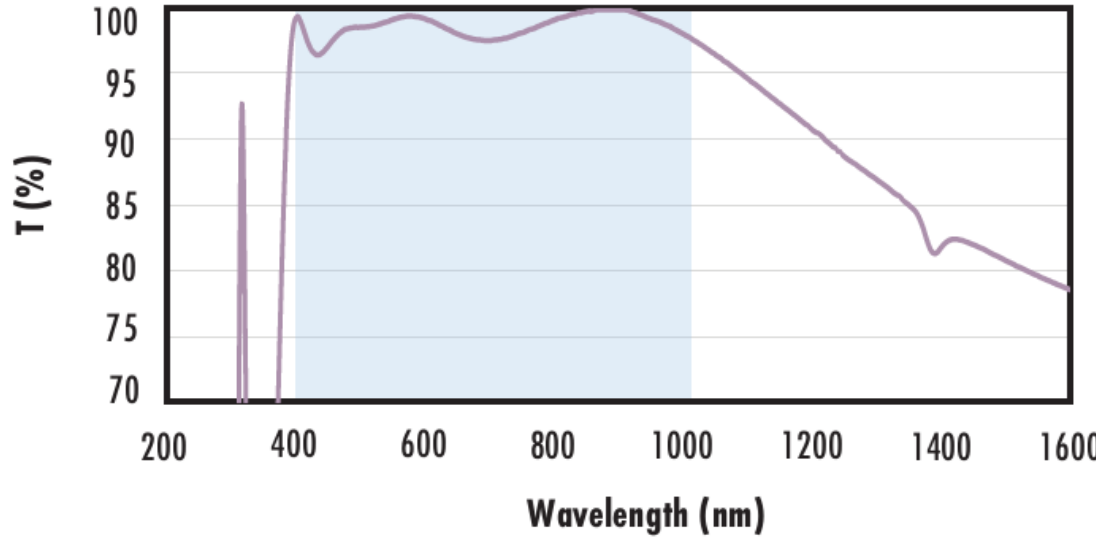
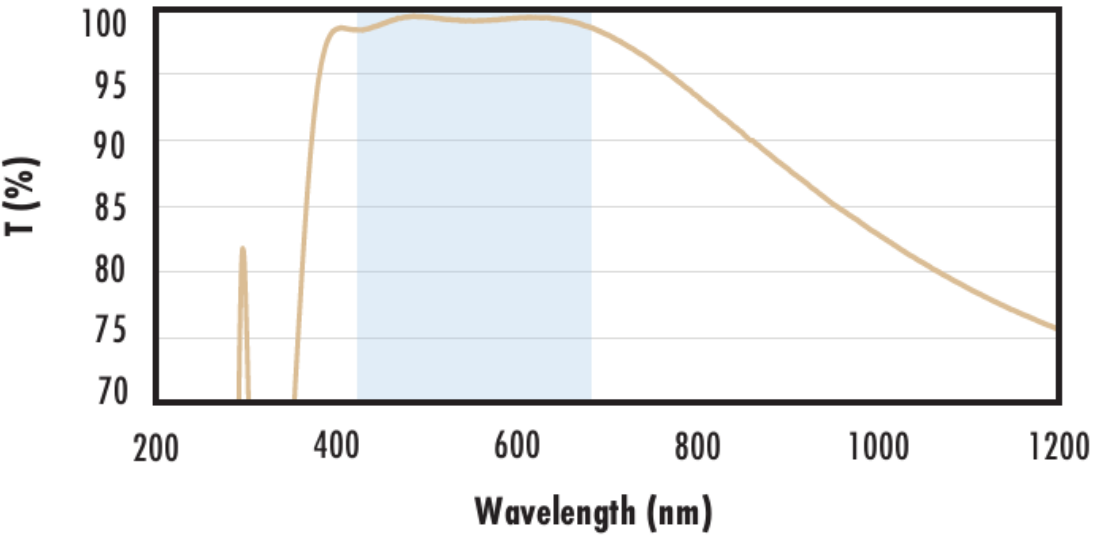
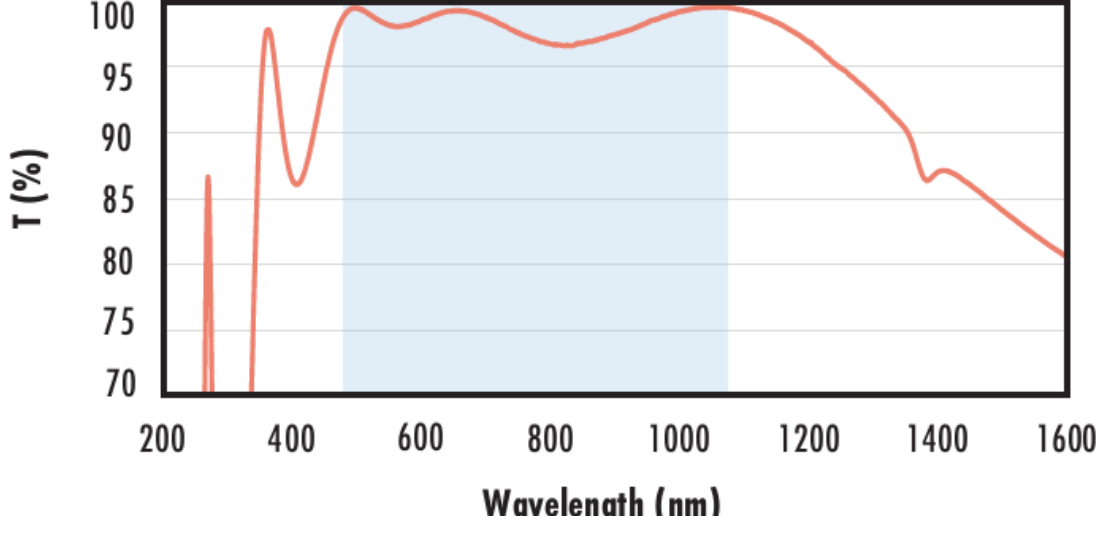
The blue shaded region indicates the coating design wavelength range, with the following specification:

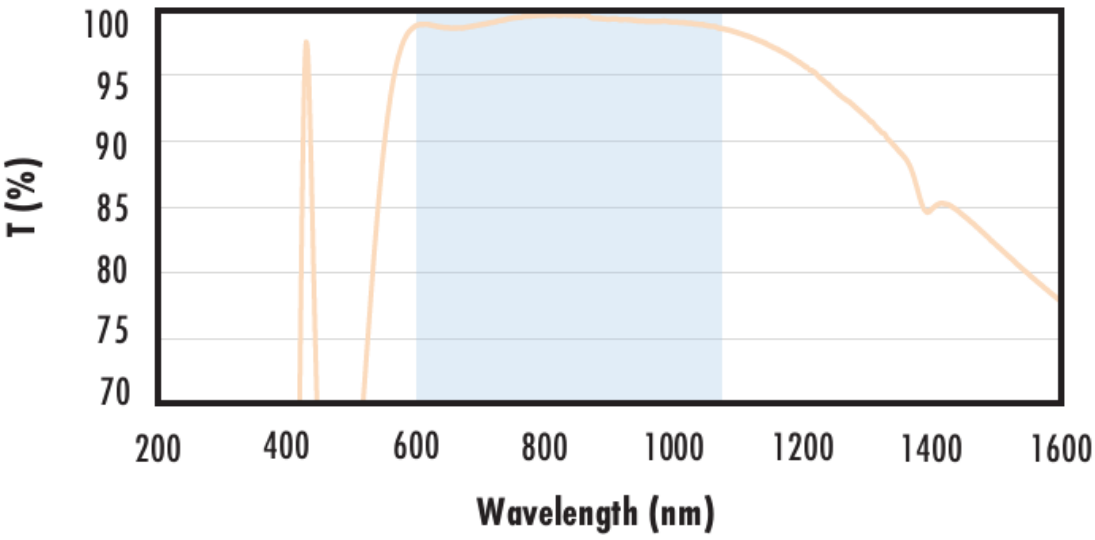
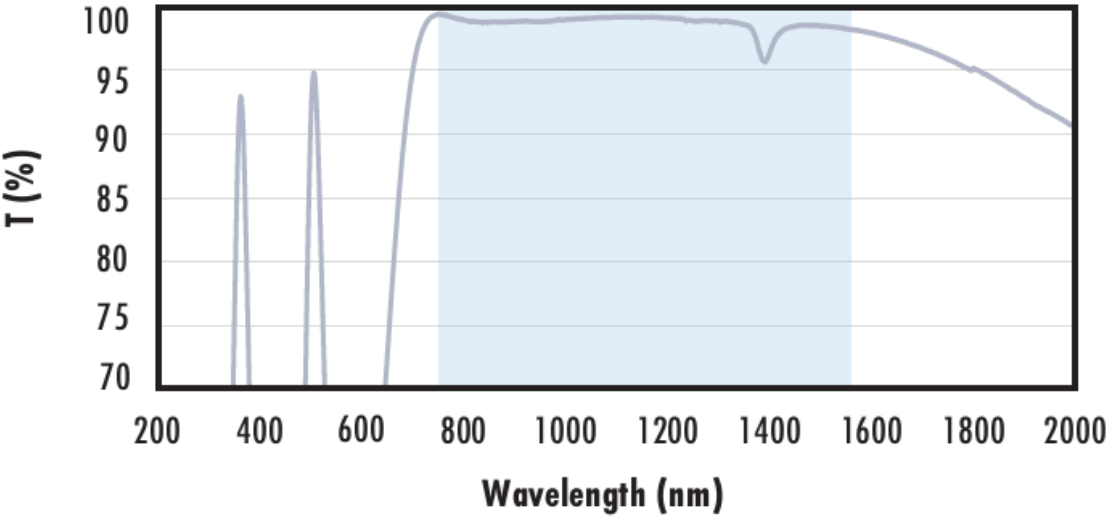
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

$$R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}$$

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

[Click Here to Download Data](#)

|                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p data-bbox="569 261 1081 371"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1341 448 1839 498">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1333 513 1848 560">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 575 1703 599"><math>R_{avg} \leq 0.5\% @ 350 - 700\text{nm}</math></p> <p data-bbox="1341 614 1839 661">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 676 1709 700"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                  |
| <p data-bbox="573 943 1077 1053"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1341 1089 1839 1139">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1333 1154 1848 1202">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1493 1213 1688 1237"><math>R_{abs} \leq 0.25\% @ 880\text{nm}</math></p> <p data-bbox="1472 1237 1709 1261"><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math></p> <p data-bbox="1472 1261 1715 1285"><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></p> <p data-bbox="1341 1323 1839 1371">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 1386 1709 1409"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="569 1608 1081 1718"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1329 1795 1856 1846">Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1333 1860 1848 1908">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 1920 1703 1944"><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p data-bbox="1341 1958 1839 2006">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 2021 1709 2044"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                         |
| <p data-bbox="548 2282 1102 2392"><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1341 2439 1839 2490">Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1333 2504 1848 2552">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1493 2564 1688 2588"><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math></p> <p data-bbox="1493 2588 1694 2611"><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math></p> <p data-bbox="1472 2611 1715 2635"><math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p data-bbox="1341 2650 1839 2697">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 2712 1709 2736"><a href="#">Click Here to Download Data</a></p>      |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>Fused Silica with NIR I Coating</div><div>Typical Transmission</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>Fused Silica with NIR II Coating</div><div>Typical Transmission</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></div><div><math>R_{abs} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}</math></div><div><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> |