

TECHSPEC<sup>®</sup> 30mm Dia. x 120mm FL, MgF<sub>2</sub> Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#18-244** CLEARANCE **1 In Stock**

- 1 + ₹10,610

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| Qty 1+         | ₹10,610 each                  |
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| General                          |                     |
|----------------------------------|---------------------|
| Plano-Convex Lens                | Type:               |
| Physical & Mechanical Properties |                     |
| 30.00 -0.025                     | Diameter (mm):      |
| <1                               | Centering (arcmin): |

|                      |                           |
|----------------------|---------------------------|
| 5.00 ±0.10           | Center Thickness CT (mm): |
| 2.92                 | Edge Thickness ET (mm):   |
| 28.5                 | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

Optical Properties

|                                             |                                                       |
|---------------------------------------------|-------------------------------------------------------|
| 120.00 @ 587.6nm                            | Effective Focal Length EFL (mm):                      |
| 116.57                                      | Back Focal Length BFL (mm):                           |
| MgF <sub>2</sub> (400-700nm)                | Coating:                                              |
| R <sub>avg</sub> ≤1.75% @ 400 - 700nm       | Coating Specification:                                |
| <a href="#">Fused Silica</a> (Corning 7980) | Substrate: <input type="checkbox"/>                   |
| 40-20                                       | Surface Quality:                                      |
| 3 Rings                                     | Power (P-V) @ 632.8nm:                                |
| 0.5 Rings                                   | Irregularity (P-V) @ 632.8nm:                         |
| ±1                                          | Focal Length Tolerance (%):                           |
| 55.02                                       | Radius R <sub>1</sub> (mm):                           |
| 4                                           | f/#:                                                  |
| 0.13                                        | Numerical Aperture NA:                                |
| 400 - 700                                   | Wavelength Range (nm):                                |
| 10 J/cm <sup>2</sup> @ 532nm, 10ns          | Damage Threshold, By Design: <input type="checkbox"/> |

Regulatory Compliance

|                                     |                             |
|-------------------------------------|-----------------------------|
| <a href="#">Compliant</a>           | RoHS 2015:                  |
| <a href="#">View</a>                | Certificate of Conformance: |
| <a href="#">Compliant</a>           | Reach 235:                  |
| Japan                               | Country of Origin:          |
| Edmund Optics India Private Limited | Imported By:                |

## 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

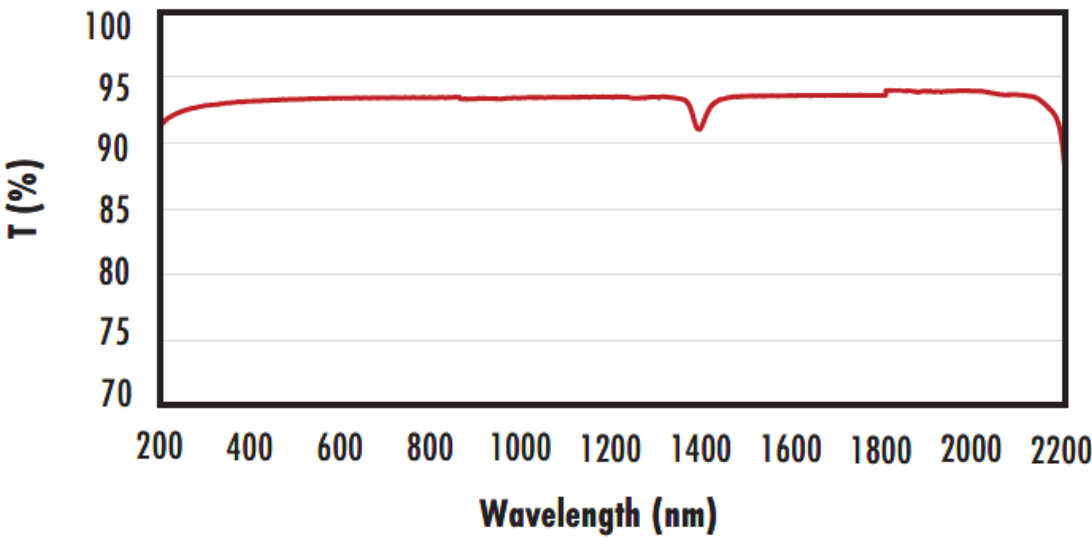
- AR Coated to Provide <1.75% Reflection per Surface for 400 - 700nm
- Precision Fused Silica Substrate
- Various Coating Options: [Uncoated](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses MgF2 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 MgF2 Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are AR coated with MgF2 to increase performance in the VIS range.

Technical Information

FUSED SILICA

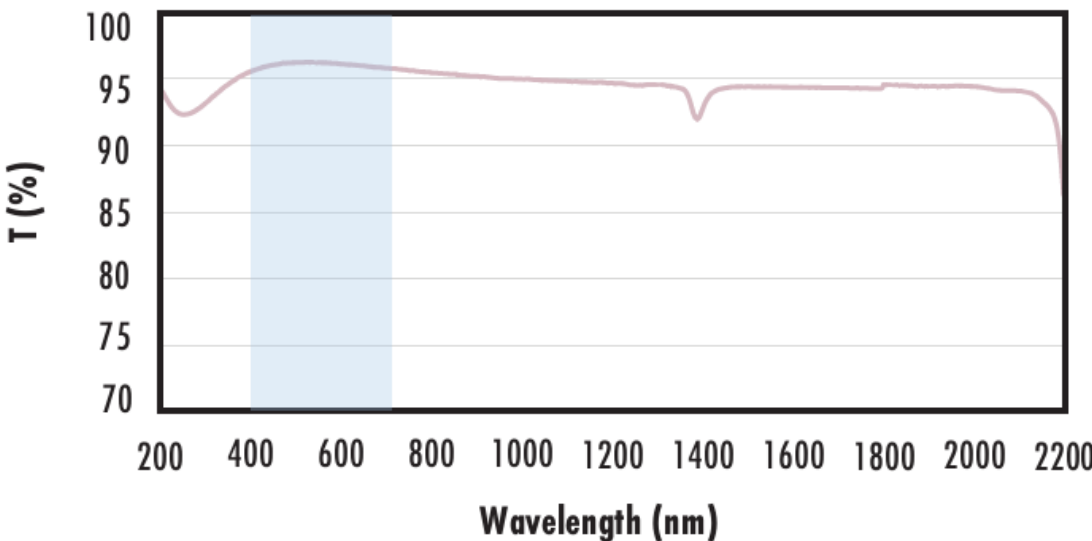
Uncoated Fused Silica  
Typical Transmission



Typical transmission of an 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 fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

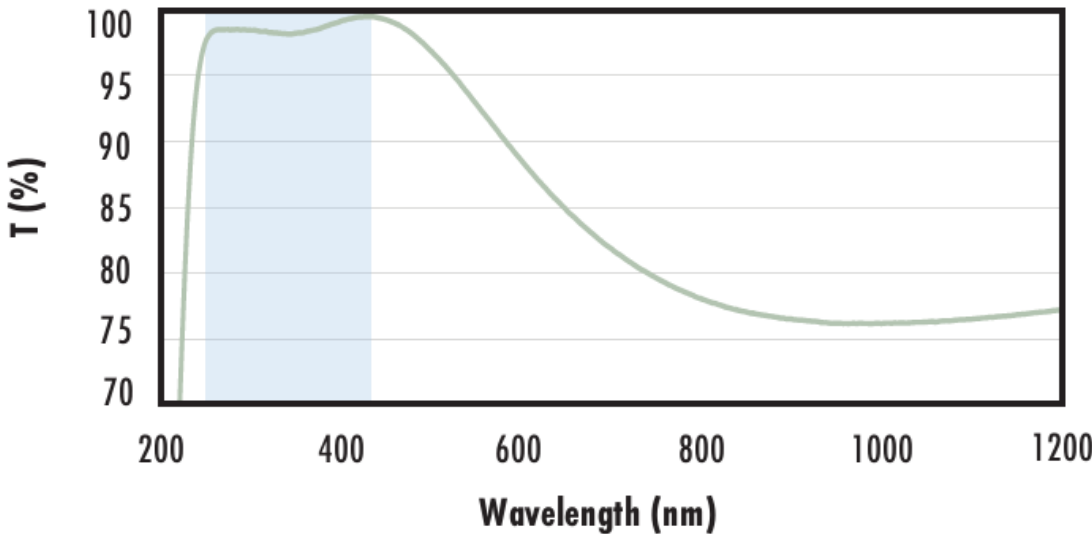
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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 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:

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

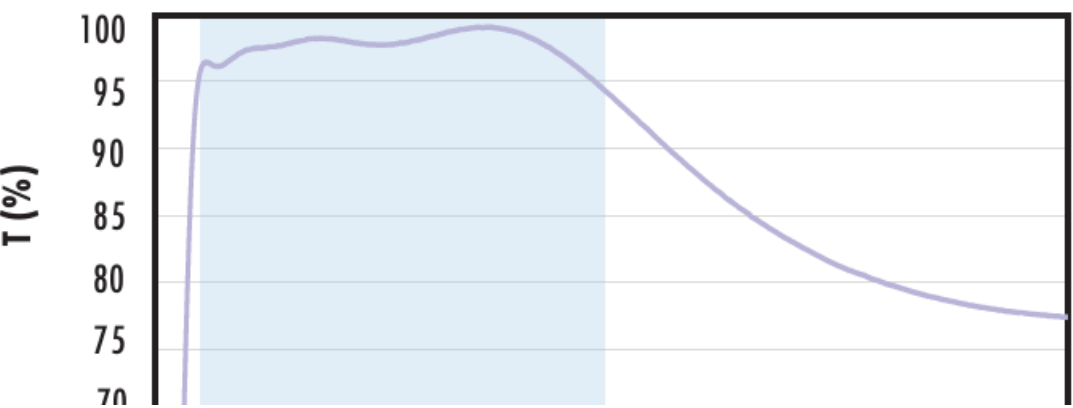
$$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$$

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

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 fused silica window with UV-VIS (250-700nm) coating at 0° AOI.

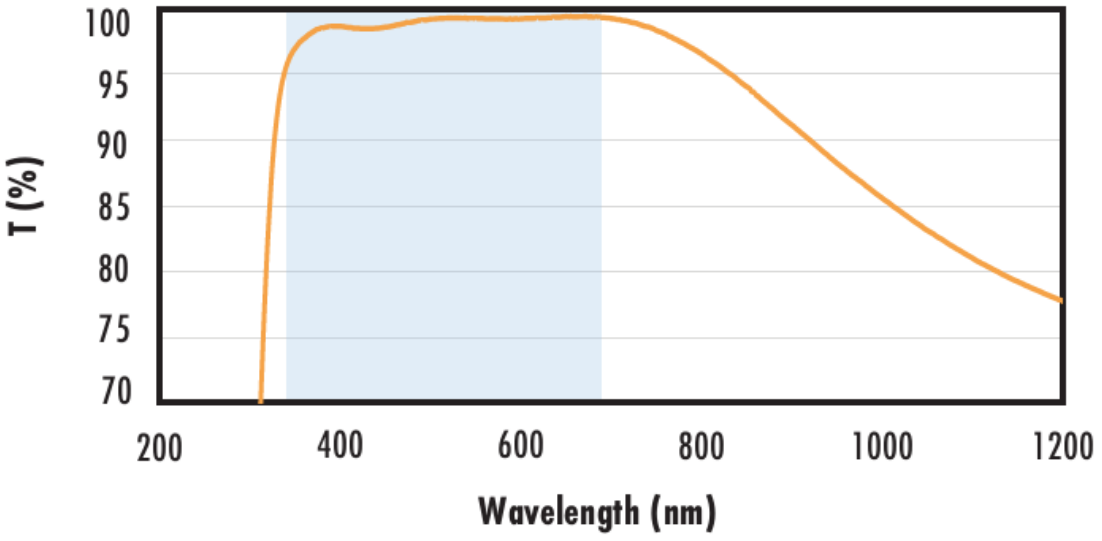
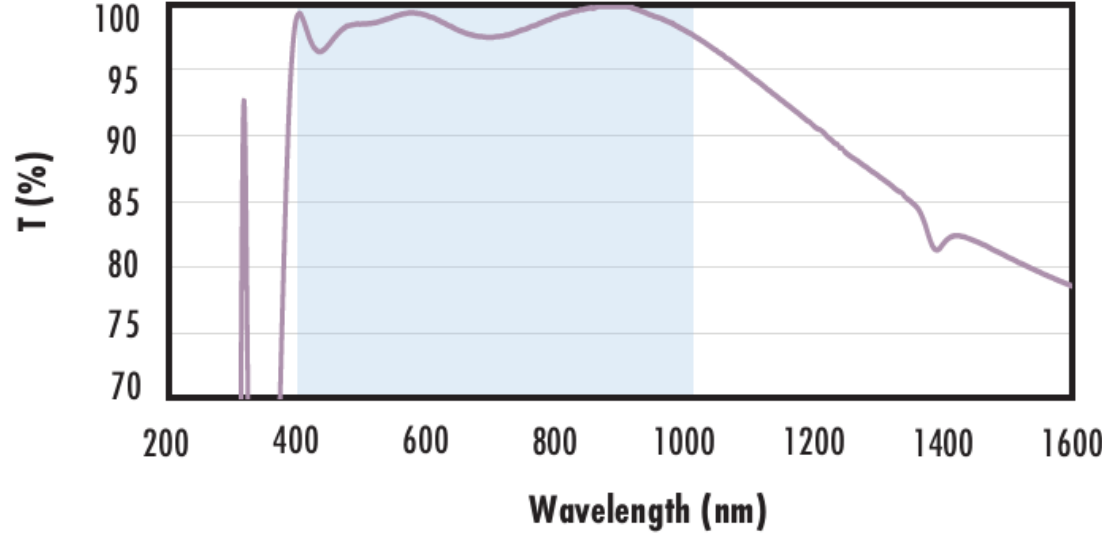
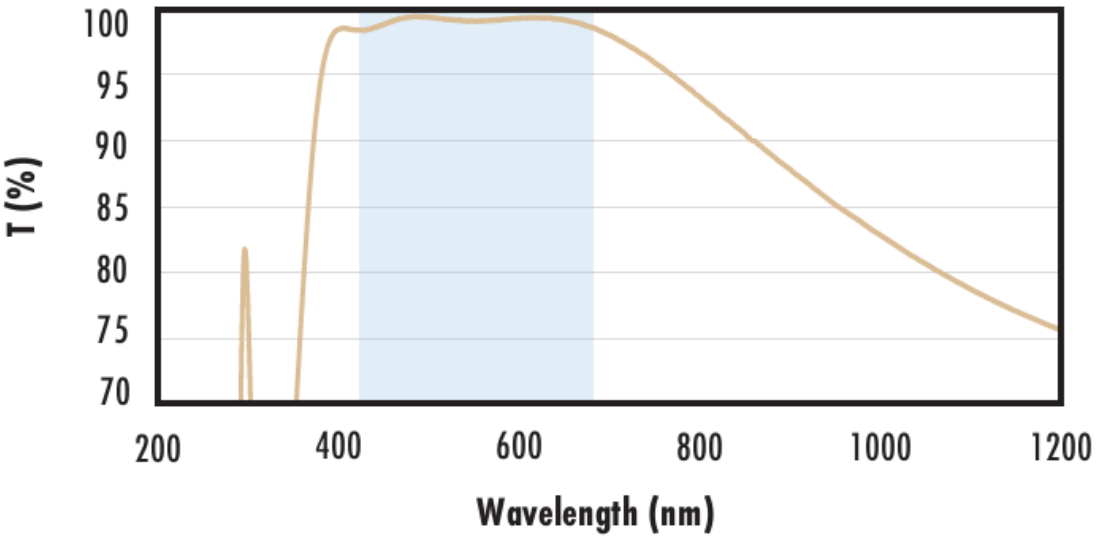
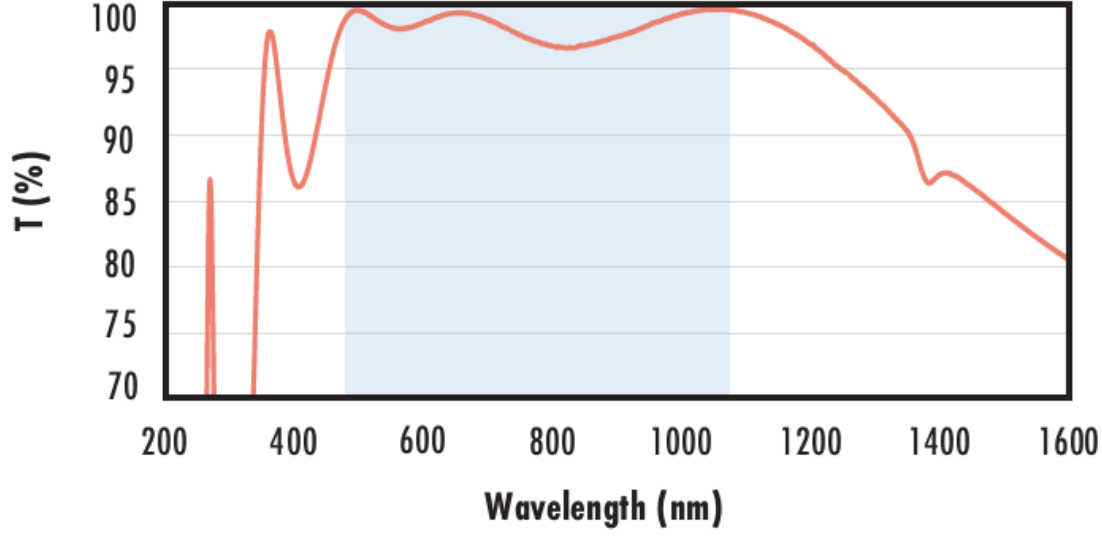
The blue shaded region indicates the coating design wavelength range, with the following specification:

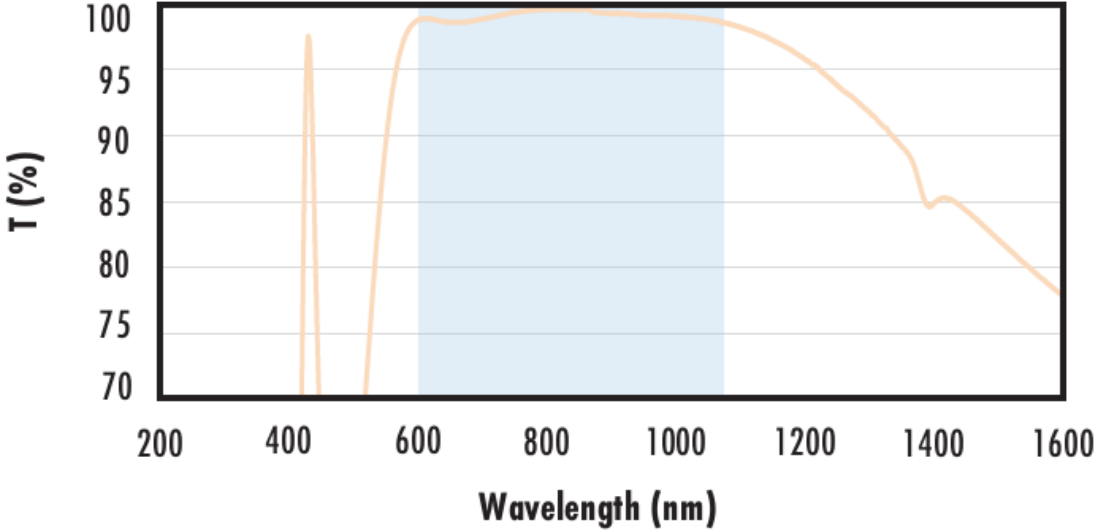
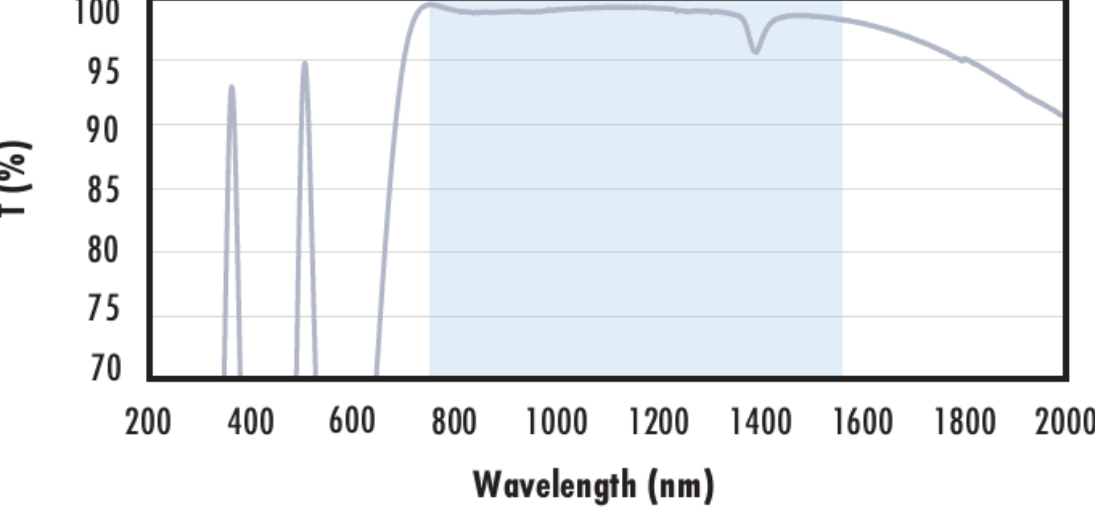
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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

[Click Here to Download Data](#)

|                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p data-bbox="567 252 1081 356"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>       | <p data-bbox="1333 439 1848 483">Typical transmission of a fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1333 501 1848 546">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1480 563 1701 587"><math>R_{avg} \leq 0.5\% @ 350 - 700\text{nm}</math></p> <p data-bbox="1333 602 1848 647">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 664 1707 685"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                  |
| <p data-bbox="567 931 1081 1035"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1333 1077 1848 1121">Typical transmission of a fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1333 1139 1848 1184">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1495 1202 1686 1225"><math>R_{abs} \leq 0.25\% @ 880\text{nm}</math></p> <p data-bbox="1474 1228 1707 1252"><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math></p> <p data-bbox="1474 1255 1707 1279"><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></p> <p data-bbox="1333 1311 1848 1356">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 1374 1707 1394"><a href="#">Click Here to Download Data</a></p> |
| <p data-bbox="567 1602 1081 1706"><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1333 1780 1848 1825">Typical transmission of a fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1333 1843 1848 1887">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1480 1905 1701 1929"><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p data-bbox="1333 1944 1848 1988">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 2006 1707 2027"><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                         |
| <p data-bbox="546 2273 1102 2377"><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1333 2427 1848 2472">Typical transmission of a fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1333 2490 1848 2534">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1495 2552 1686 2576"><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math></p> <p data-bbox="1495 2579 1686 2602"><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math></p> <p data-bbox="1474 2605 1707 2629"><math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p data-bbox="1333 2644 1848 2689">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1474 2706 1707 2727"><a href="#">Click Here to Download Data</a></p>      |

|                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div data-bbox="260 121 1283 750"><h3>Fused Silica with NIR I Coating<br/>Typical Transmission</h3></div>    | <div data-bbox="1339 299 1843 552"><p>Typical transmission of a 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\% \text{ @ } 600 - 1050\text{nm}</math></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></div>                                                                                                                                        |
| <div data-bbox="260 804 1283 1418"><h3>Fused Silica with NIR II Coating<br/>Typical Transmission</h3></div> | <div data-bbox="1339 937 1843 1264"><p>Typical transmission of a 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\% \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></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></div> |

Coating Curves