

TECHSPEC<sup>®</sup> 25mm Dia. x 100mm FL, YAG-BBAR Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#18-083** 9 In Stock

-

1

+

S\$235<sup>.97</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | S\$235.97 each                |
| Qty 6-25       | S\$188.18 each                |
| Qty 26-49      | S\$177.73 each                |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

SPECIFICATIONS

General

Type:

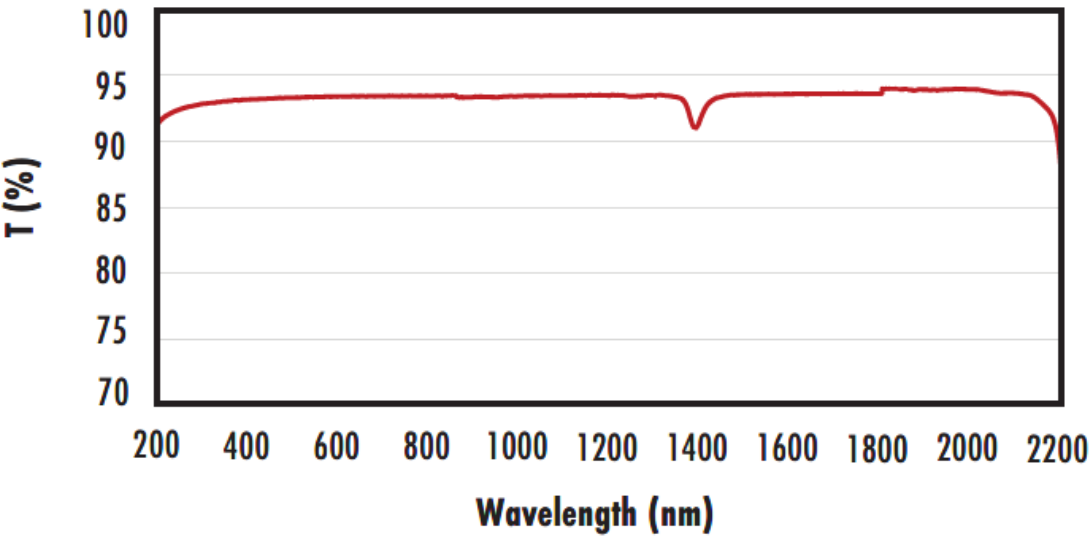
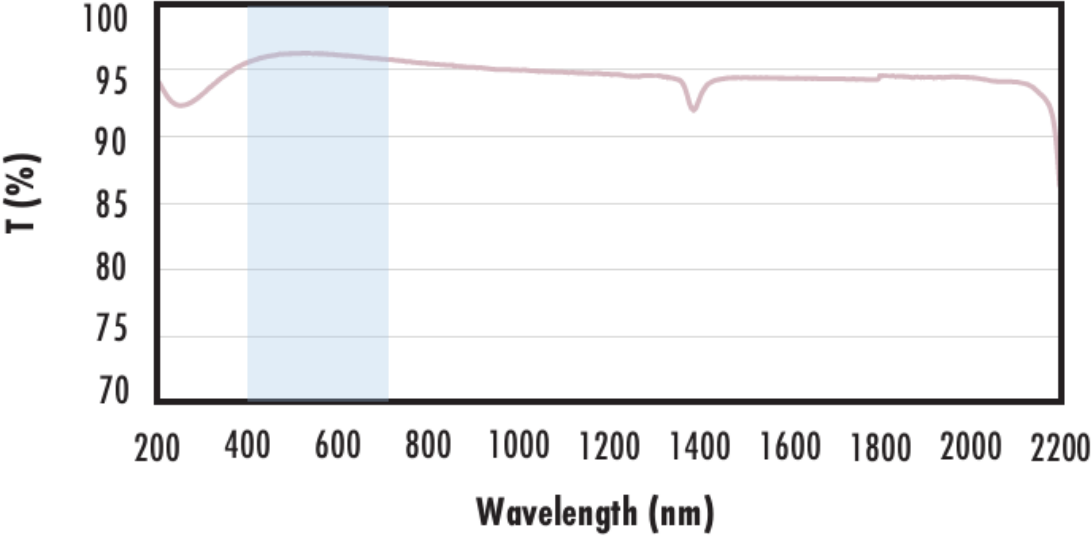
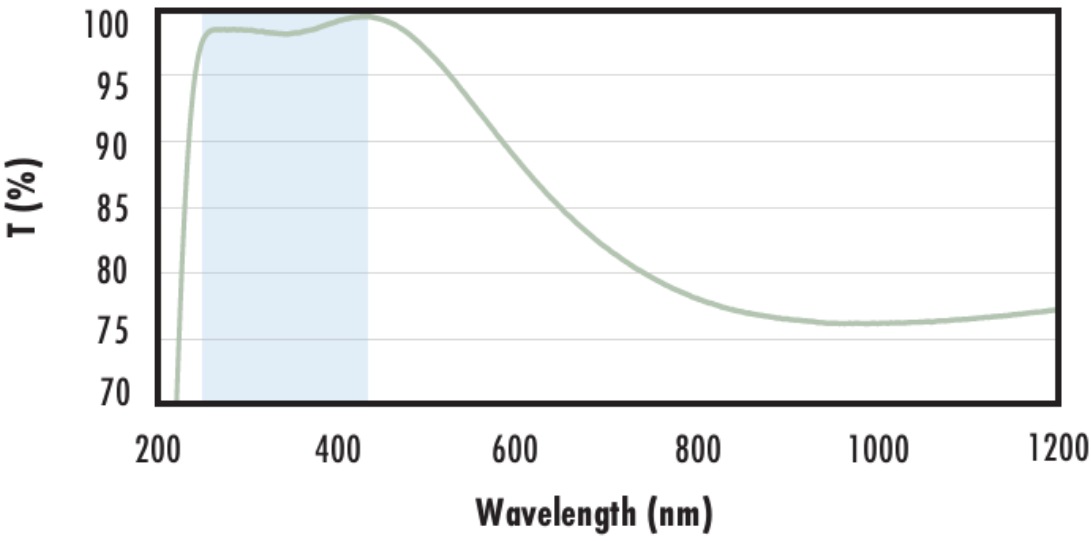
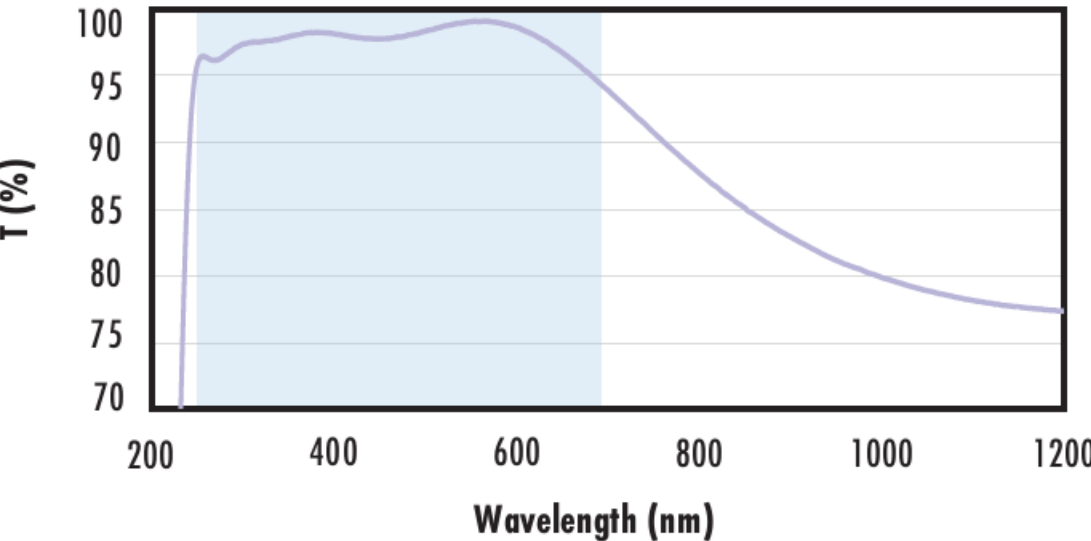
|                                                                                                              |                                                       |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Plano-Convex Lens                                                                                            |                                                       |
| Physical & Mechanical Properties                                                                             |                                                       |
| 25.00 -0.025                                                                                                 | Diameter (mm):                                        |
| <1                                                                                                           | Centering (arcmin):                                   |
| 3.79 ±0.10                                                                                                   | Center Thickness CT (mm):                             |
| 2.05                                                                                                         | Edge Thickness ET (mm):                               |
| 24                                                                                                           | Clear Aperture CA (mm):                               |
| Protective as needed                                                                                         | Bevel:                                                |
| Optical Properties                                                                                           |                                                       |
| 100.00 @ 587.6nm                                                                                             | Effective Focal Length EFL (mm):                      |
| 97.40                                                                                                        | Back Focal Length BFL (mm):                           |
| YAG-BBAR (500-1100nm)                                                                                        | Coating:                                              |
| R <sub>abs</sub> <0.25% @ 532nm<br>R <sub>abs</sub> <0.25% @ 1064nm<br>R <sub>avg</sub> <1.0% @ 500 - 1100nm | Coating Specification:                                |
| Fused Silica (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 (%):                           |
| 45.85                                                                                                        | Radius R <sub>1</sub> (mm):                           |
| 4                                                                                                            | f#:                                                   |
| 0.13                                                                                                         | Numerical Aperture NA:                                |
| 500 - 1100                                                                                                   | Wavelength Range (nm):                                |
| 5 J/cm² @ 532nm, 10ns                                                                                        | Damage Threshold, By Design: <input type="checkbox"/> |
| Regulatory Compliance                                                                                        |                                                       |
| Compliant                                                                                                    | RoHS 2015:                                            |
| View                                                                                                         | Certificate of Conformance:                           |
| Compliant                                                                                                    | Reach 235:                                            |

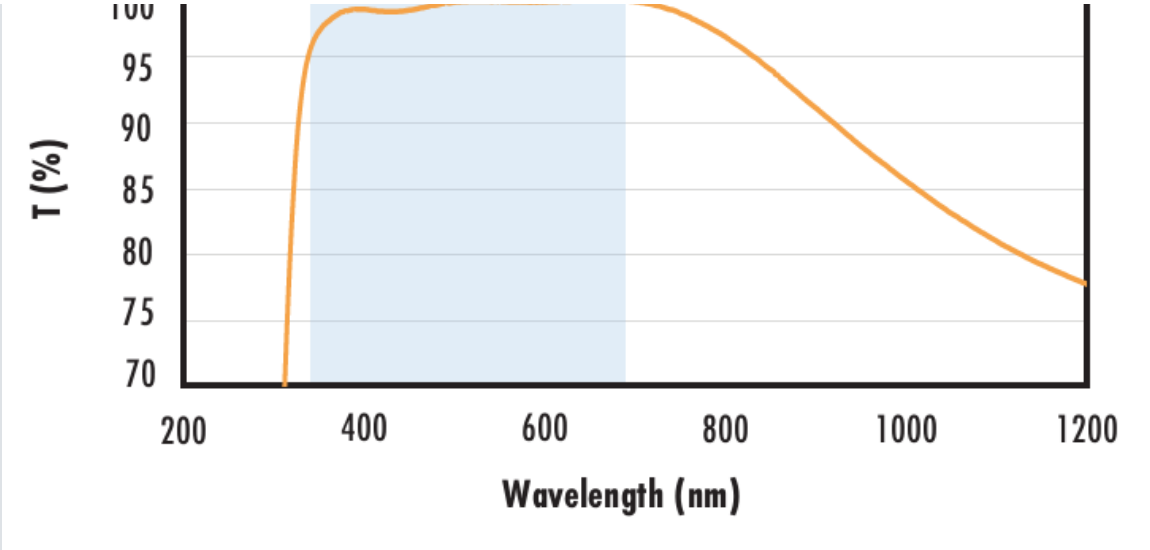
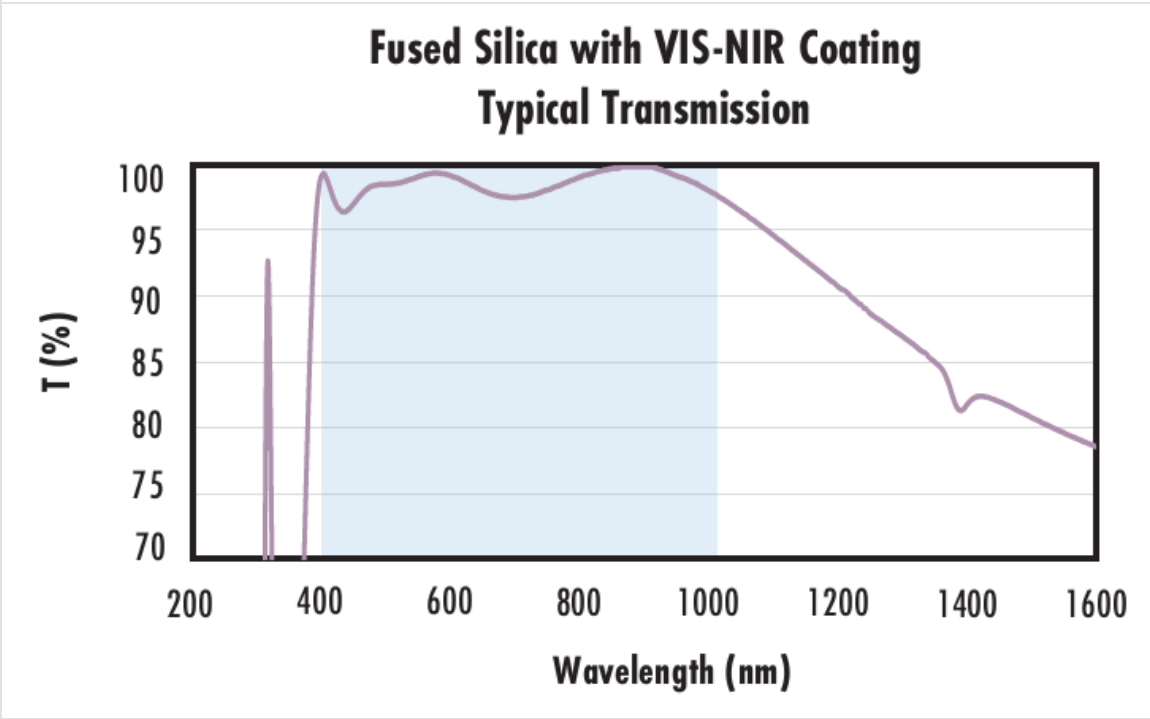
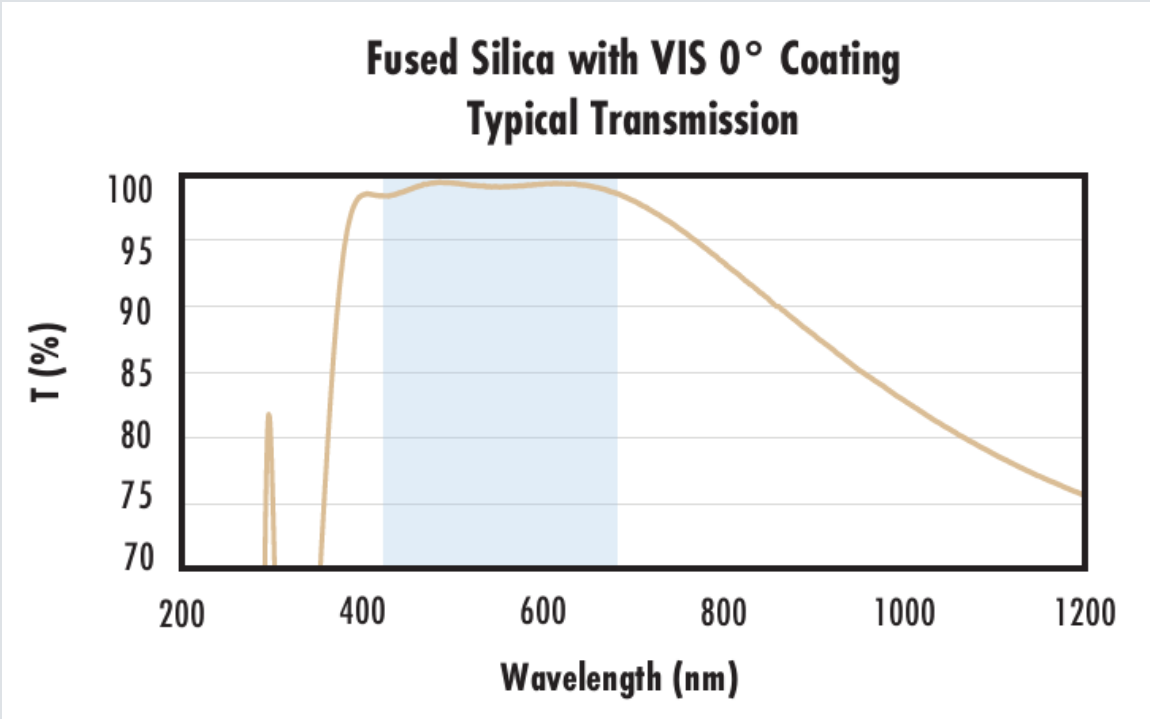
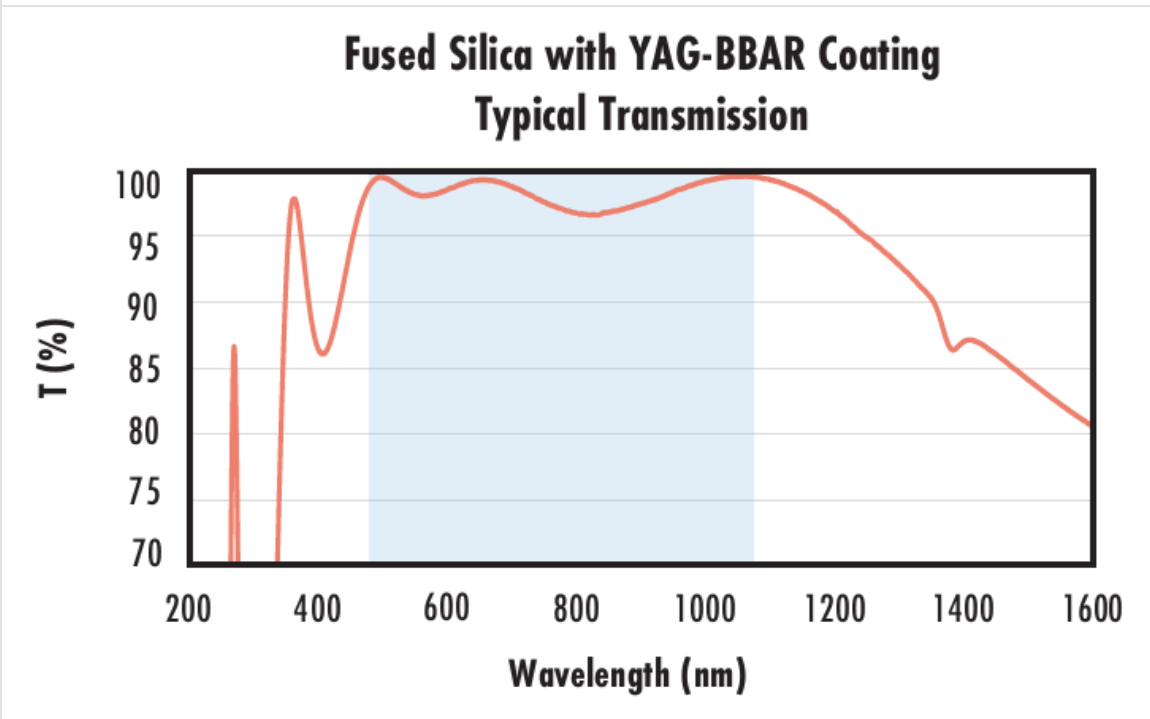
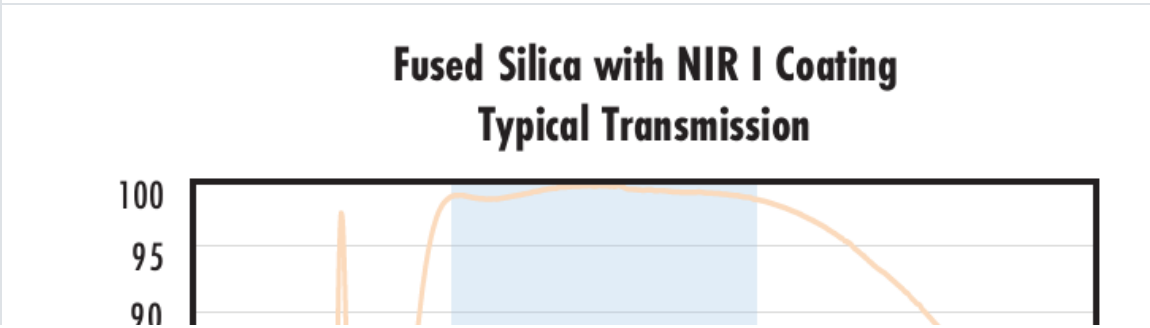
## PRODUCT DETAILS

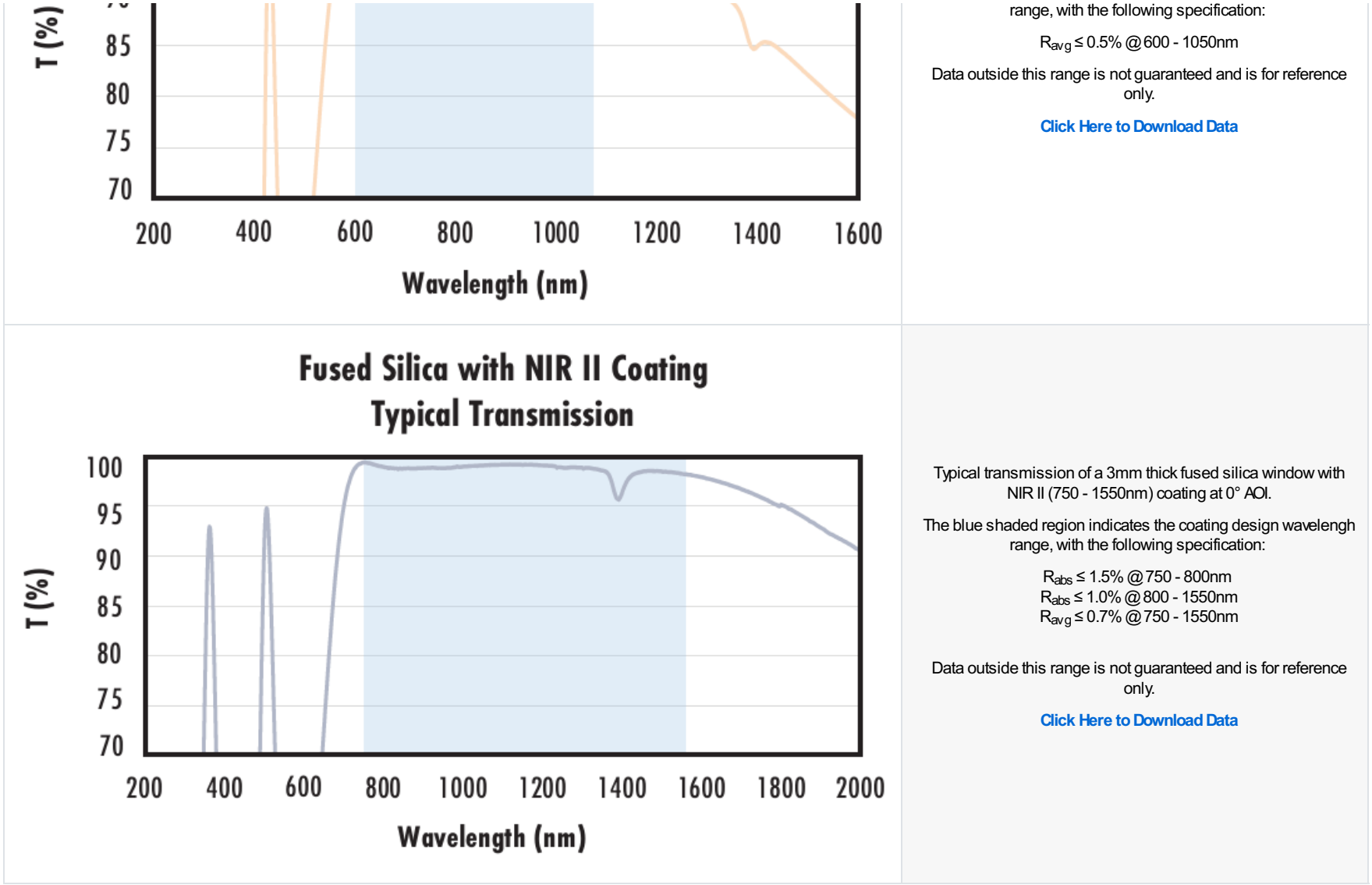
- AR Coated to Provide <1.0% Reflection per Surface for 500 - 1100nm
  - Precision Fused Silica Substrate
  - Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [NIR I](#), and [NIR II](#)
- TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses YAG-BBAR 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 YAG-BBAR Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are YAG-BBAR coated and feature less than 0.25% reflection at common Nd:YAG laser wavelengths of 532nm and 1064nm.

## TECHNICAL INFORMATION

| FUSED SILICA          |  |
|-----------------------|--|
| Uncoated Fused Silica |  |

|                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Uncoated Fused Silica</div> <div>Typical Transmission</div>                       | <p>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                                                                                                                                                                                              |
| <div>Fused Silica with MgF<sub>2</sub> Coating</div> <div>Typical Transmission</div>  | <p>Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) 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 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</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>Fused Silica with UV-AR Coating</div> <div>Typical Transmission</div>           | <p>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) 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 1.0\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.75\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.5\% @ 370 - 420\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>Fused Silica with UV-VIS Coating</div> <div>Typical Transmission</div>          | <p>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) 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 1.0\% @ 350 - 450\text{nm}</math><br/><math>R_{avg} \leq 1.5\% @ 250 - 700\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>Fused Silica with VIS-EXT Coating</div> <div>Typical Transmission</div>         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                      | <p>Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) 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\% @ 350 - 700\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>                                                                                                                  |
| <p><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>    | <p>Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) 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\% @ 880\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 890 - 1000\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> |
| <p><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>    | <p>Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) 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\% @ 425 - 675\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>                                                                                                                   |
| <p><b>Fused Silica with YAG-BBAR Coating</b><br/><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\% @ 532\text{nm}</math><br/><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math><br/><math>R_{avg} \leq 1.0\% @ 500 - 1100\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>      |
| <p><b>Fused Silica with NIR I Coating</b><br/><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</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

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