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TECHSPEC<sup>®</sup> 12mm Dia. x 100mm FL, YAG-BBAR Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#18-063** 8 In Stock

-

1

+

₹10,588

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | ₹10,588 each                  |
| Qty 6-25       | ₹8,486 each                   |
| Qty 26-49      | ₹7,941 each                   |
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General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

12.00 -0.025

|                      |                           |
|----------------------|---------------------------|
| <1                   | Centering (arcmin):       |
| 2.44 ±0.05           | Center Thickness CT (mm): |
| 2.05                 | Edge Thickness ET (mm):   |
| 11                   | Clear Aperture CA (mm):   |
| Protective as needed | Bevel:                    |

|                                                                                                              |                                  |
|--------------------------------------------------------------------------------------------------------------|----------------------------------|
| Optical Properties                                                                                           |                                  |
| 100.00 @ 587.6nm                                                                                             | Effective Focal Length EFL (mm): |
| 98.33                                                                                                        | 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 (Coming 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 (%):      |
| 45.85                                                                                                        | Radius R <sub>1</sub> (mm):      |
| 8.33                                                                                                         | f/#:                             |
| 0.06                                                                                                         | Numerical Aperture NA:           |
| 500 - 1100                                                                                                   | Wavelength Range (nm):           |
| 5 J/cm <sup>2</sup> @ 532nm, 10ns                                                                            | Damage Threshold, By Design: □   |

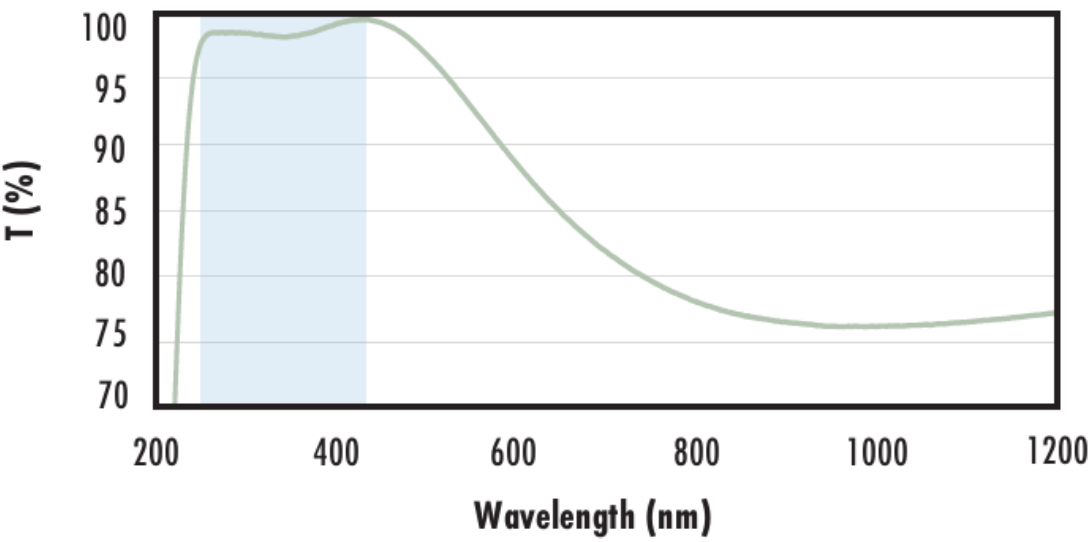
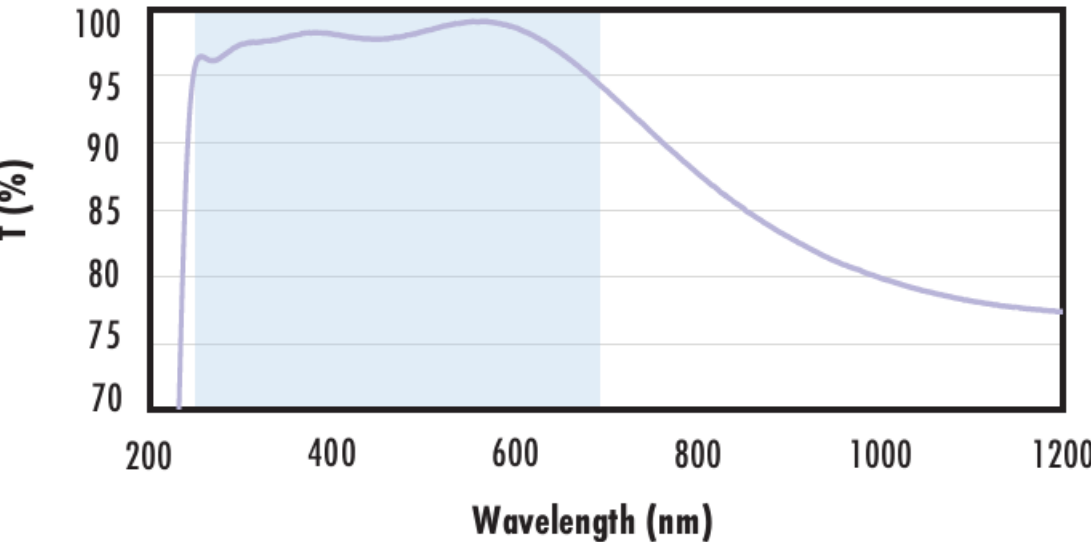
|                                     |                             |
|-------------------------------------|-----------------------------|
| Regulatory Compliance               |                             |
| Compliant                           | RoHS 2015:                  |
| View              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

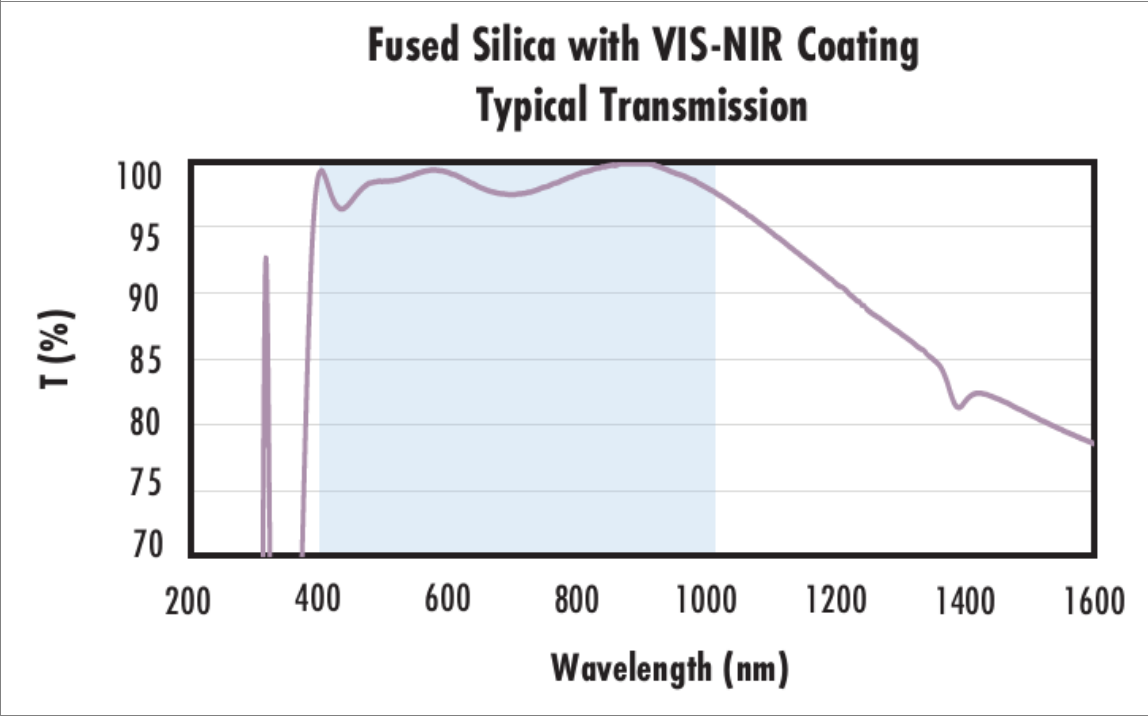
## Product Details

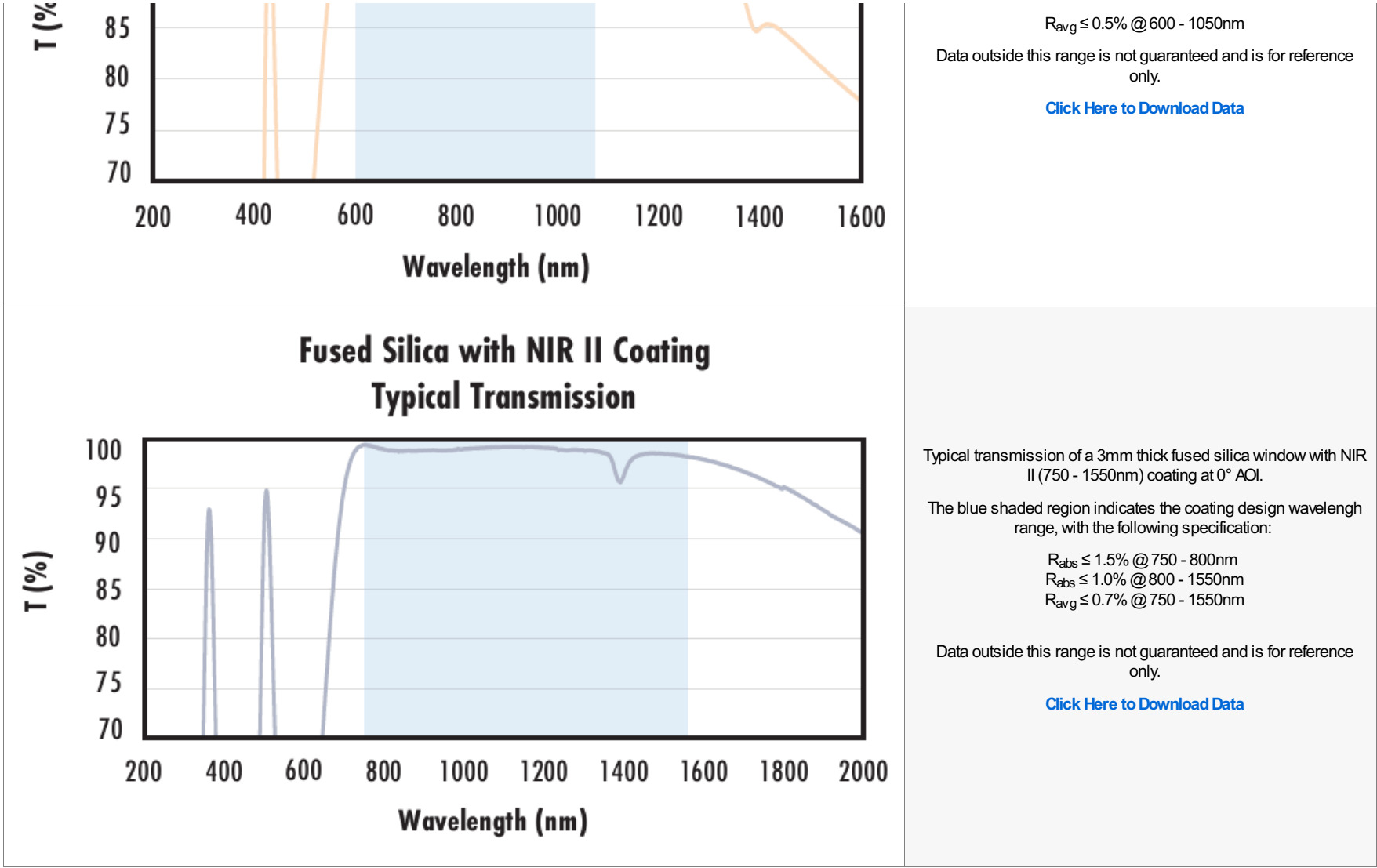
- AR Coated to Provide <1.0% Reflection per Surface for 500 - 1100nm
  - Precision Fused Silica Substrate
  - Various Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [NIR I](#), and [NIR II](#)
- TECHSPEC® UV Fused Silica Plano-Convex (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><div>Typical Transmission</div></div>                                                | <div>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</div> <div><a href="#">Click Here to Download Data</a></div>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <div><div>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</div></div> | <div>Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><math>R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}</math></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 UV-AR Coating<br/>Typical Transmission</div></div>          | <div>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><math>R_{abs} \leq 1.0\% \text{ @ } 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.5\% \text{ @ } 370 - 420\text{nm}</math></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 UV-VIS Coating<br/>Typical Transmission</div></div>         | <div>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><math>R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}</math><br/><math>R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}</math></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 VIS-EXT Coating<br/>Typical Transmission</div></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 range, with the following specification:</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](#).