

TECHSPEC® 10mm Dia., 1mm Thick, VIS 0° Coated, $\lambda/4$ Fused Silica Window



TECHSPEC® $\lambda/4$ UV Fused Silica Windows

Stock #18-321 **20+ In Stock**

C\$190⁰⁰

ADD TO CART

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-5 | C\$190.40 each |
| Qty 6-25 | C\$151.20 each |
| Qty 26-49 | C\$141.40 each |
| Need More? | Request Quote |

Product Downloads

General

Protective Window Type:
 Glass Type of Window:

Physical & Mechanical Properties

9.00 Clear Aperture CA (mm):

| | |
|----------------------|--|
| 10.00 +0.00/-0.10 | Diameter (mm): |
| 1.00 ±0.10 | Thickness (mm): |
| <1 | Parallelism (arcmin): |
| Protective as needed | Bevel: |
| 90 | Clear Aperture (%): |
| Fine Ground | Edges: |
| 0.16 | Poisson's Ratio: |
| 73 | Young's Modulus (GPa): |
| 522.00 | Knoop Hardness (kg/mm²): |

Optical Properties

| | |
|---|--|
| MS 0° (425-675nm) | Coating: |
| Fused Silica (Corning 7980) | Substrate: <input type="checkbox"/> |
| 1.458 | Index of Refraction (n_d): |
| 40-20 | Surface Quality: |
| M4 | Transmitted Wavefront, P-V: |
| 67.8 | Abbe Number (v_d): |
| R _{avg} ≤ 0.4% @ 425 - 675nm | Coating Specification: |
| 425 - 675 | Wavelength Range (nm): |
| 5 J/cm ² @ 532nm, 10ns | Damage Threshold, Reference: <input type="checkbox"/> |

Material Properties

| | |
|---|---|
| 2.20 | Density (g/cm³): |
| 0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C) | Coefficient of Thermal Expansion CTE (10⁻⁶/°C): |
| 7980 0G | Fused Silica Grade: |

Regulatory Compliance

| | |
|---------------------------|------------------------------------|
| Compliant | RoHS 2015: |
| View | Certificate of Conformance: |
| Compliant | REACH 241: |

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

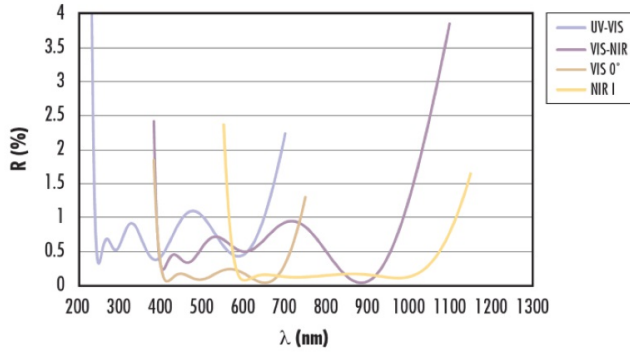
- Available Uncoated or BBAR Coated for UV, Visible, and NIR
- Ideal for Imaging Applications
- Circular and Rectangular Sizes from 5 to 200mm

- 1λ or λ/10 UV Fused Silica Windows Also Available

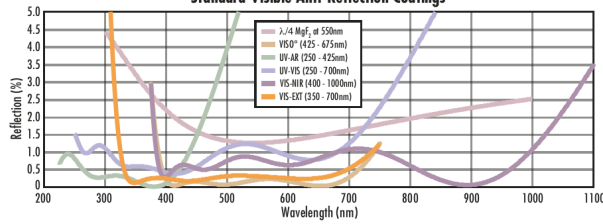
TECHSPEC® λ/4 UV Fused Silica Windows are manufactured with 40-20 surface quality and λ/4 transmitted wavefront error specifications, making them ideal for imaging applications. Featuring UV fused silica substrates, these windows provide high transmission from the ultraviolet (UV) through the visible and near-infrared (NIR). Broadband anti-reflection (BBAR) coating options are available to minimize reflection losses and increase transmission. TECHSPEC λ/4 UV Fused Silica Windows are used in optical imaging applications, in low to medium powered laser applications, and as protective windows, especially in applications requiring transmission of UV light.

Technical Information

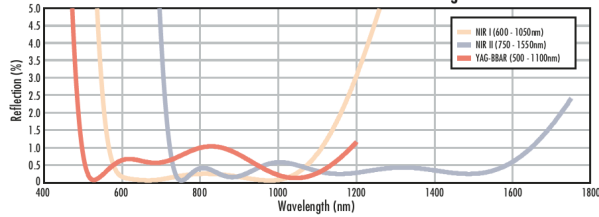
Anti-Reflection Coating Curves



Standard Visible Anti-Reflection Coatings



Standard Near Infrared Anti-Reflection Coatings



FUSED SILICA

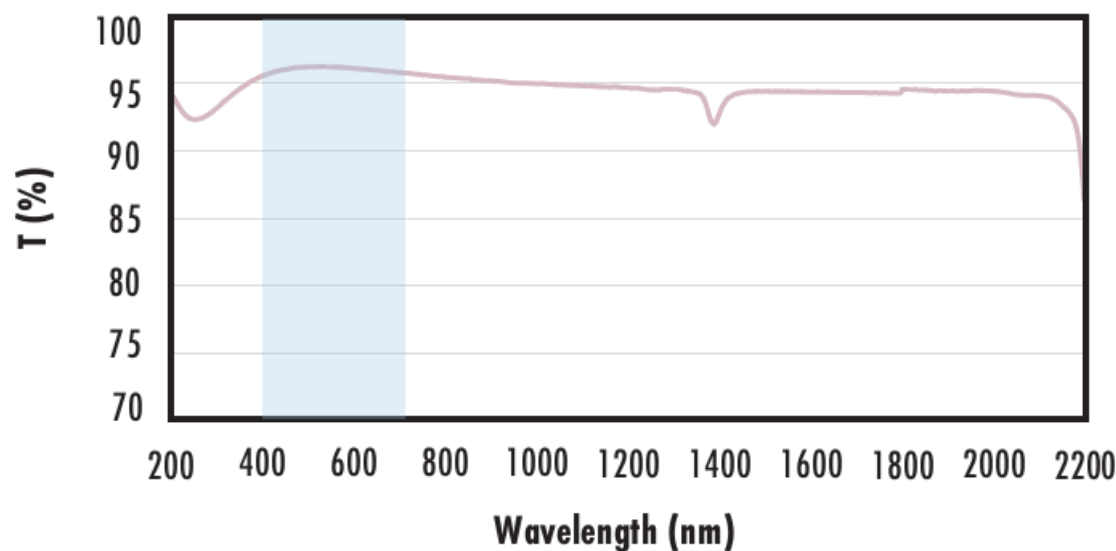
Uncoated Fused Silica Typical Transmission



Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.

[Click Here to Download Data](#)

Fused Silica with MgF₂ Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF₂ (400-700nm) coating at 0° AOI.

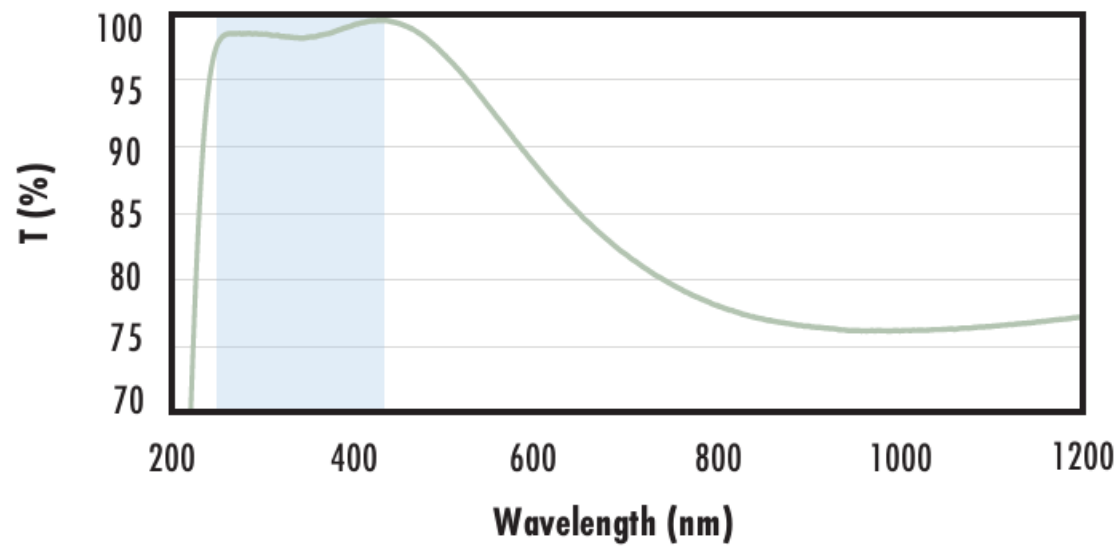
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

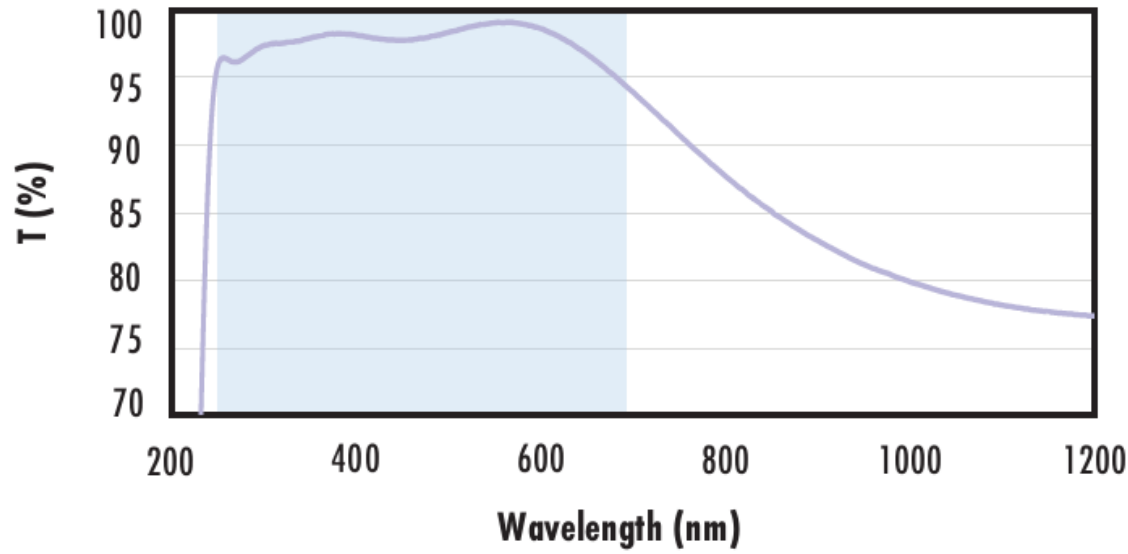
$$R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$$

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

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:

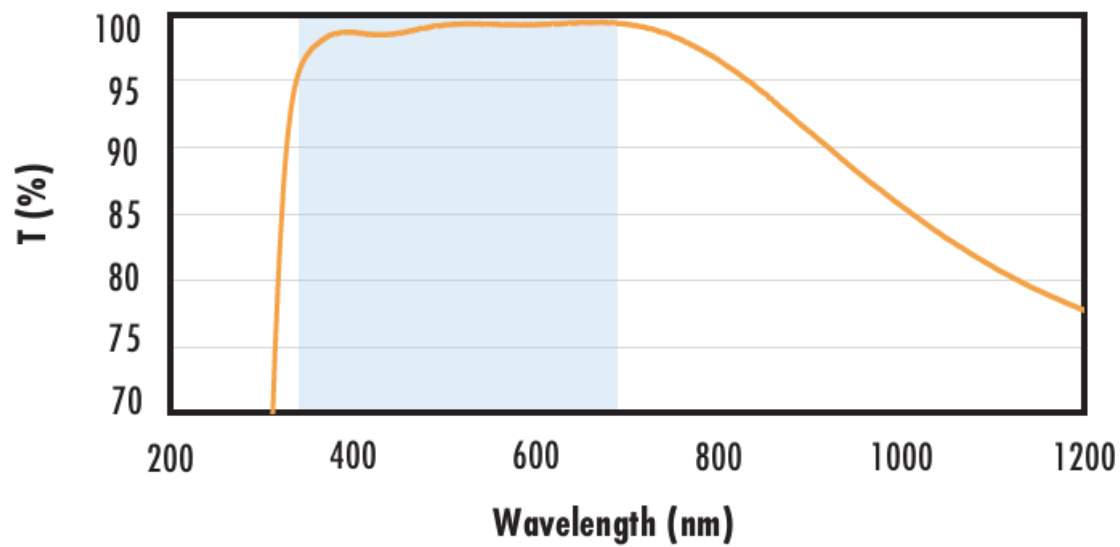
$$R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$$

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

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

[Click Here to Download Data](#)

Fused Silica with VIS-EXT Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

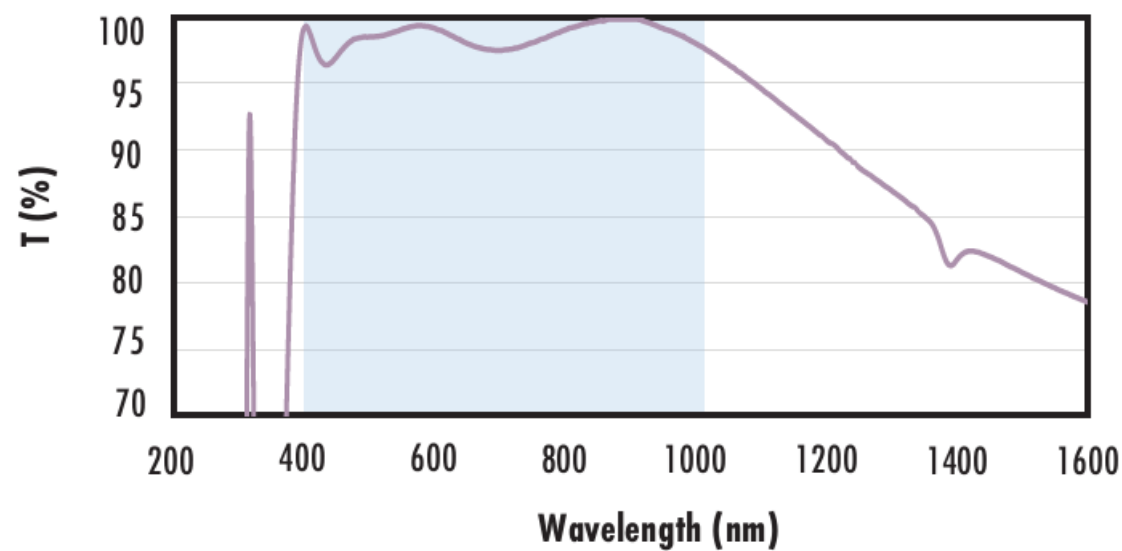
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$$

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

[Click Here to Download Data](#)

Fused Silica with VIS-NIR Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

$$R_{abs} \leq 0.25\% @ 880\text{nm}$$

$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$$

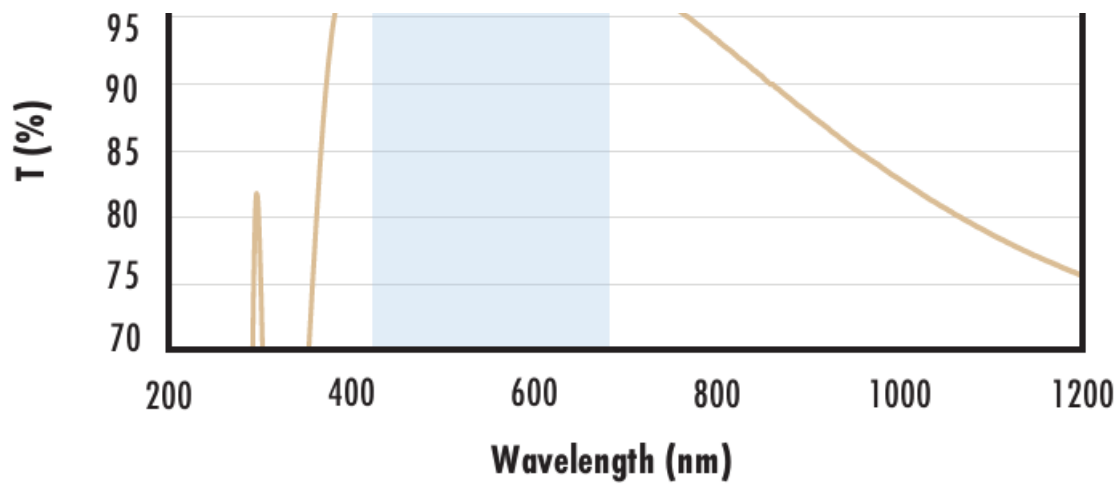
Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

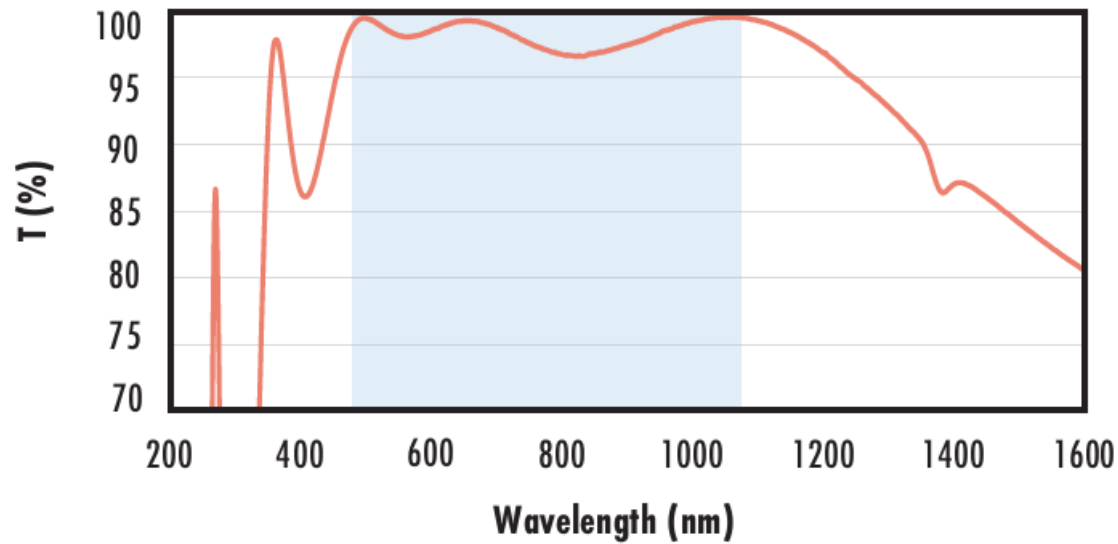
Fused Silica with VIS 0° Coating Typical Transmission



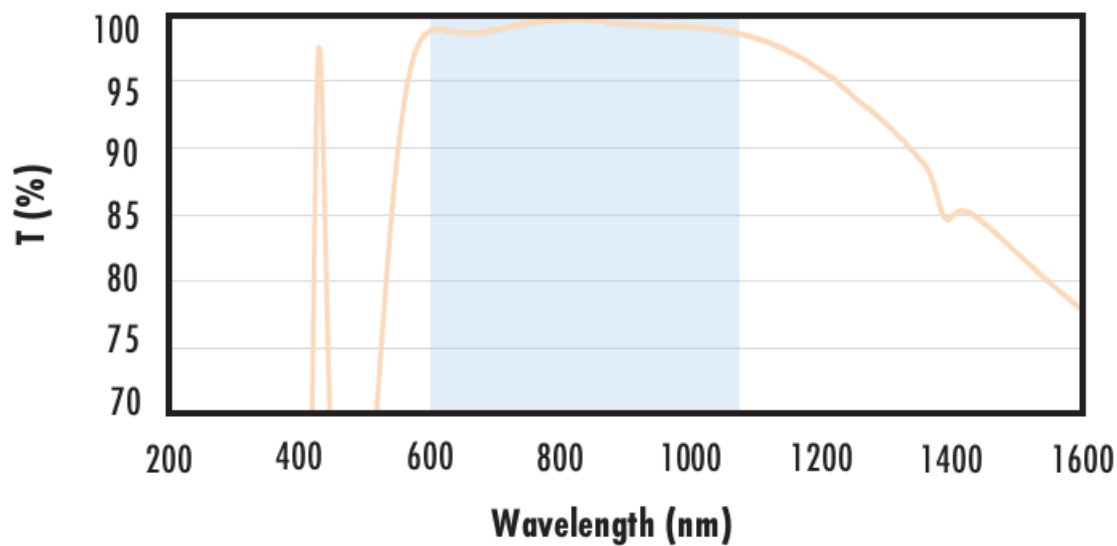
Typical transmission of a 3mm thick fused silica window



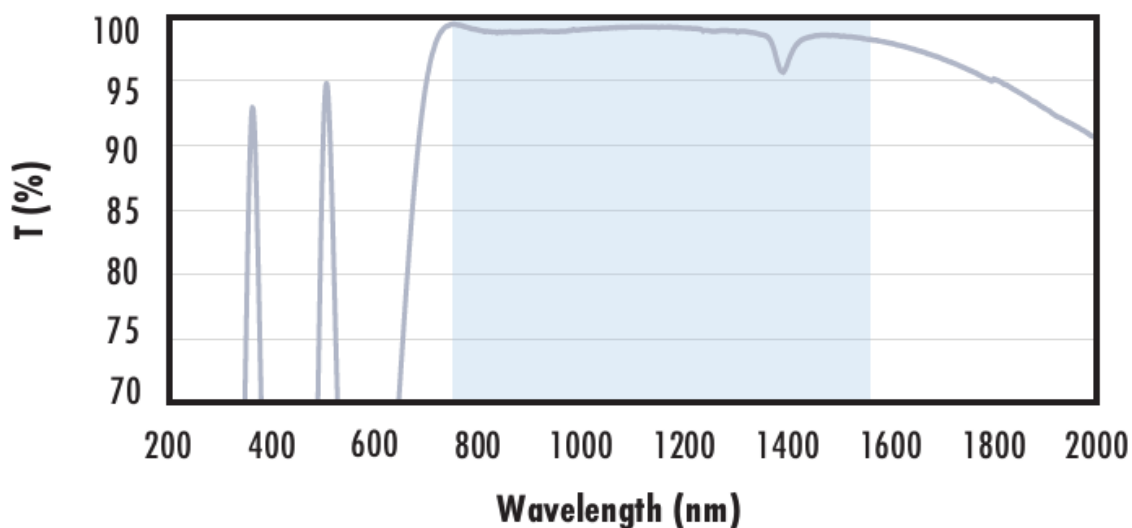
**Fused Silica with YAG-BBAR Coating
Typical Transmission**



**Fused Silica with NIR I Coating
Typical Transmission**



**Fused Silica with NIR II Coating
Typical Transmission**



Coating Curves

Compatible Mounts

