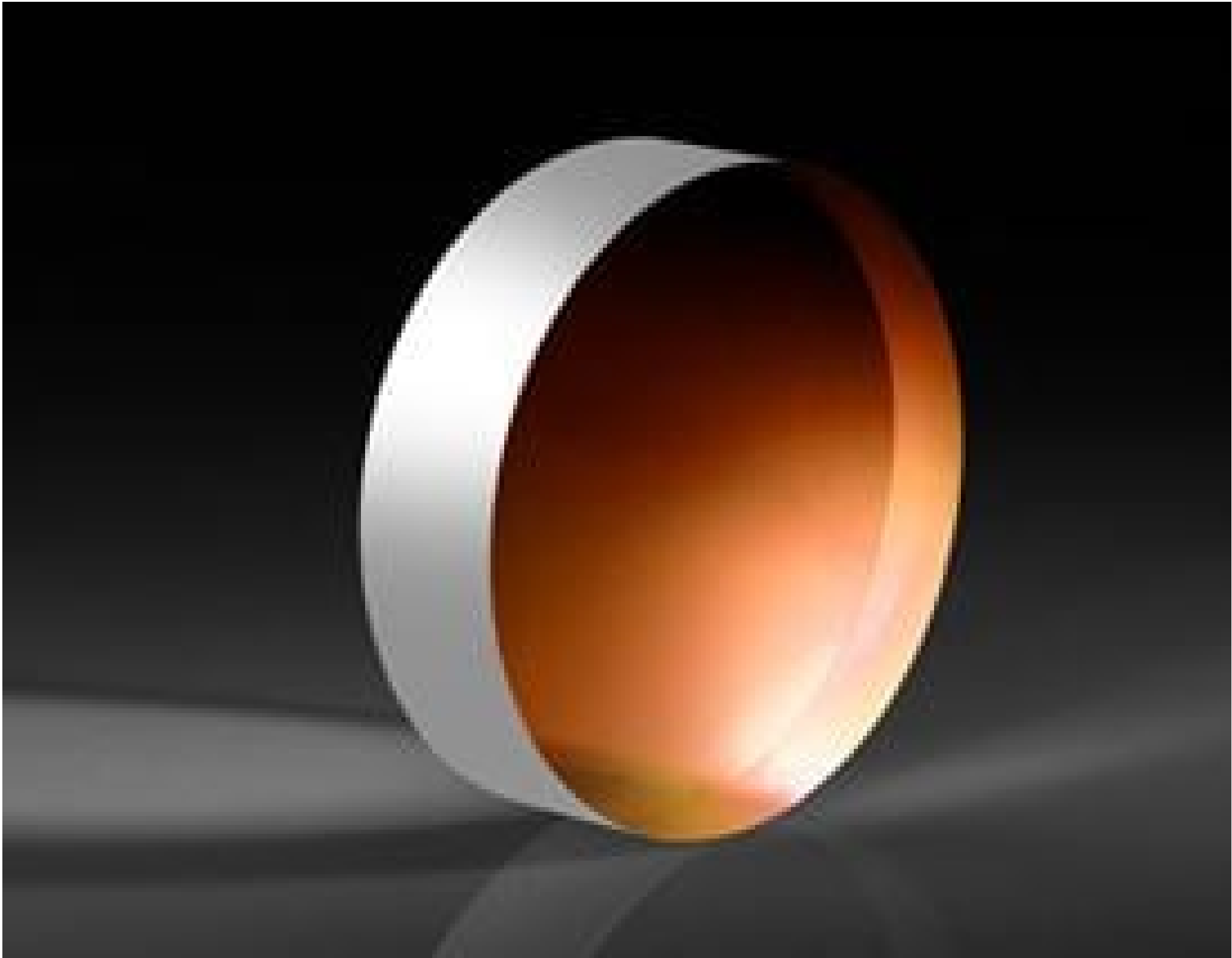


TECHSPEC[®] 50mm Dia., 6mm Thick, Uncoated λ/10 Fused Silica Window



Stock **#34-602** 5 In Stock

-

1

+

C\$372^{.96}

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Volume Pricing	
Qty 1-5	C\$372.96 each
Qty 6-25	C\$296.81 each
Qty 26-49	C\$278.94 each
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SPECIFICATIONS

General

Type:
Protective Window

Physical & Mechanical Properties

Protective as needed	Bevel:
80	Clear Aperture (%):
40.00	Clear Aperture CA (mm):
50.00 +0.00/-0.20	Diameter (mm):
6.00 ±0.10	Thickness (mm):
Fine Ground	Edges:
522.00	Knoop Hardness (kg/mm²):
<5	Parallelism (arcsec):
0.16	Poisson's Ratio:
73	Young's Modulus (GPa):

Optical Properties

67.8	Abbe Number (v _d):
Uncoated	Coating:
1.458	Index of Refraction (n _d):
Fused Silica (Corning 7980)	Substrate:
20-10	Surface Quality:
<i>N</i> 10	Transmitted Wavefront, P-V:
200 - 2200	Wavelength Range (nm):

Material Properties

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

Regulatory Compliance

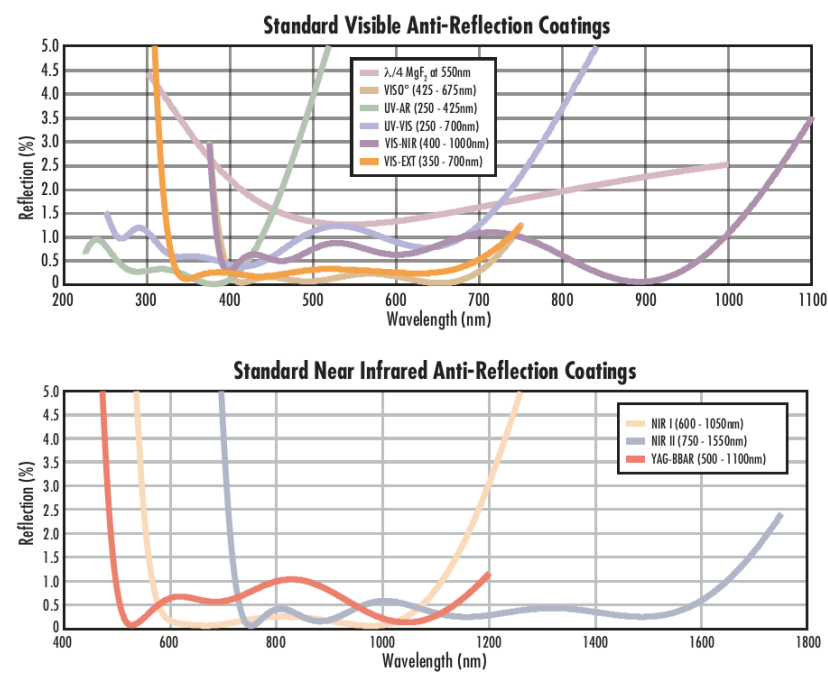
Compliant	RoHS 2015:
Compliant	Reach 211:
View	Certificate of Conformance:

PRODUCT DETAILS

- UV, Visible, and NIR Anti-Reflection Coated Versions Available
- N*10 Transmitted Wavefront Distortion
- Circular and Square Sizes from 2mm to 150mm
- [1λ](#) or [λ/4](#) UV Fused Silica Windows Also Available

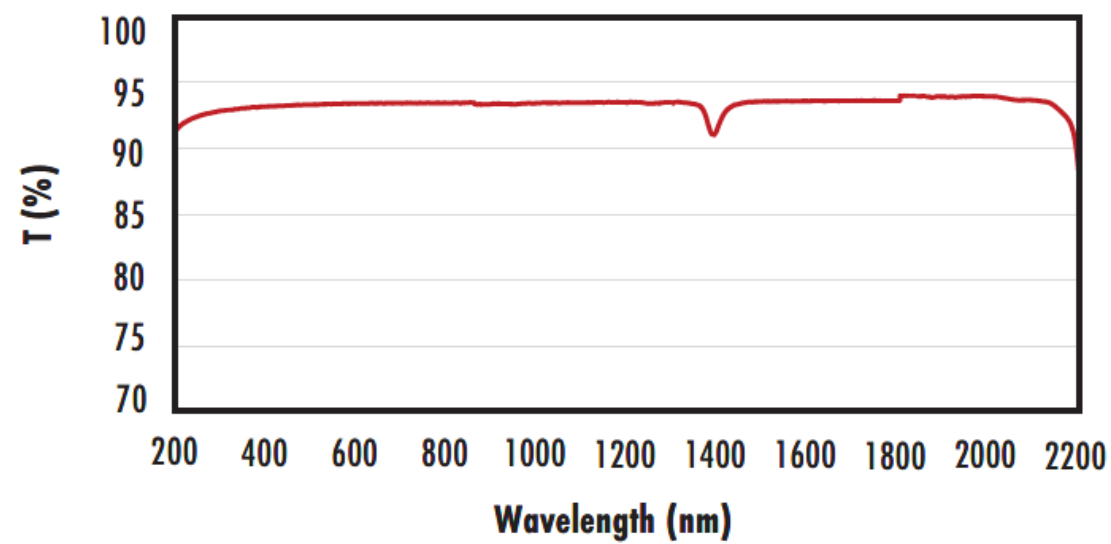
TECHSPEC® *N*10 UV Fused Silica Windows feature laser-grade surface quality and parallelism. In addition, these windows will limit the transmitted wavefront distortion to *N*10. The superior transmission characteristics, excellent thermal properties, and high tolerance manufacturing specifications make these windows an excellent choice for more demanding applications. TECHSPEC *N*10 UV Fused Silica Windows are available for purchase in circular and square sizes ranging from 2mm to 150mm.. These windows are offered uncoated or with anti-reflection coatings optimized for the UV or visible spectrum.

TECHNICAL INFORMATION



FUSED SILICA

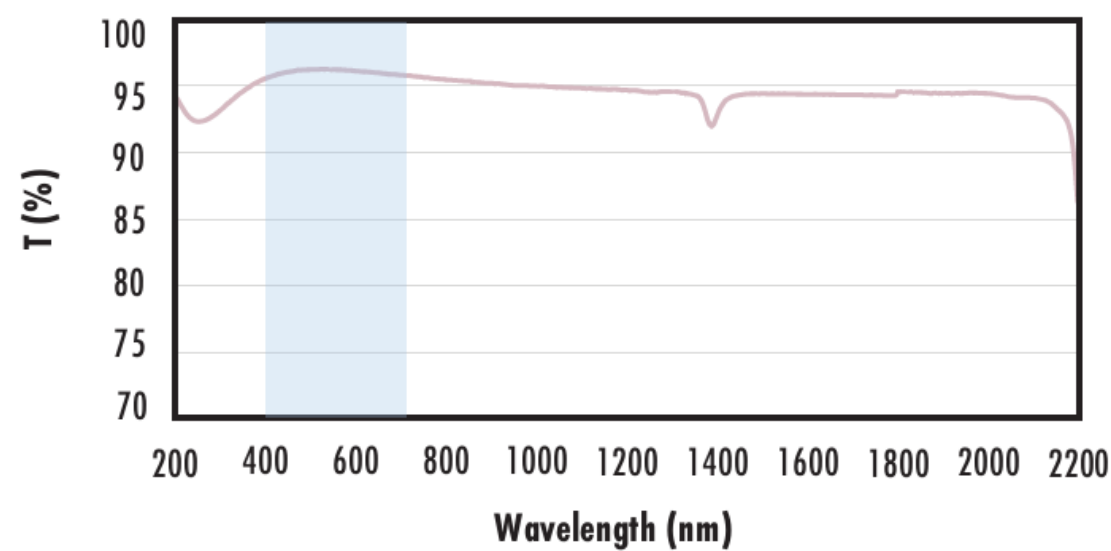
Uncoated Fused Silica Typical Transmission



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

[Click Here to Download Data](#)

Fused Silica with MgF₂ Coating Typical Transmission



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

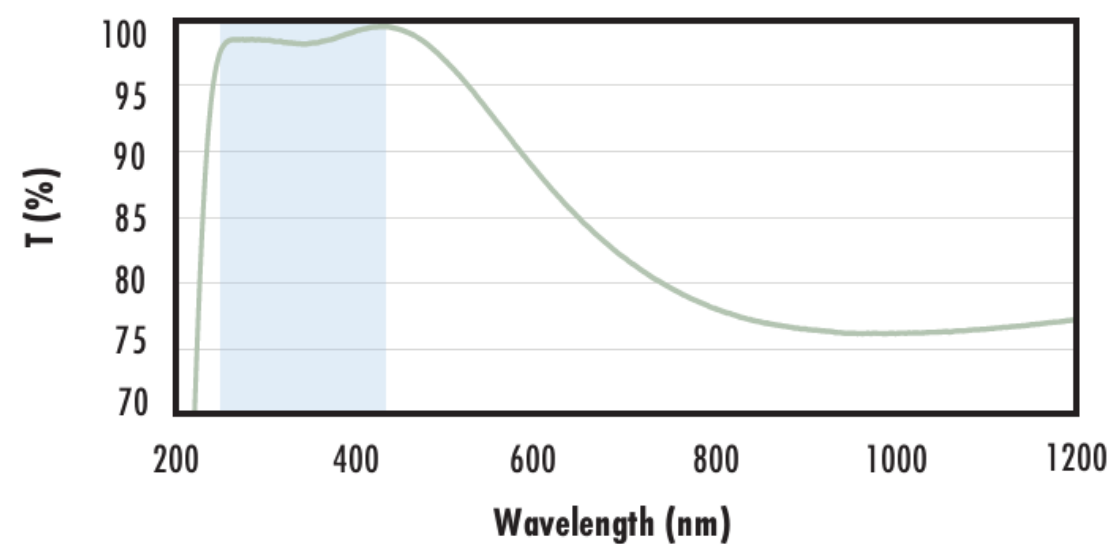
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

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Figure 1 is a line graph showing the transmission spectrum of the proposed metasurface. The x-axis represents Wavelength (nm) from 200 to 1200, and the y-axis represents T (%) from 70 to 100. The curve shows high transmission (near 100%) from 200 nm to approximately 700 nm, then decreases to about 77% at 1200 nm. A light blue shaded region highlights the high-transmission band from approximately 250 nm to 700 nm.

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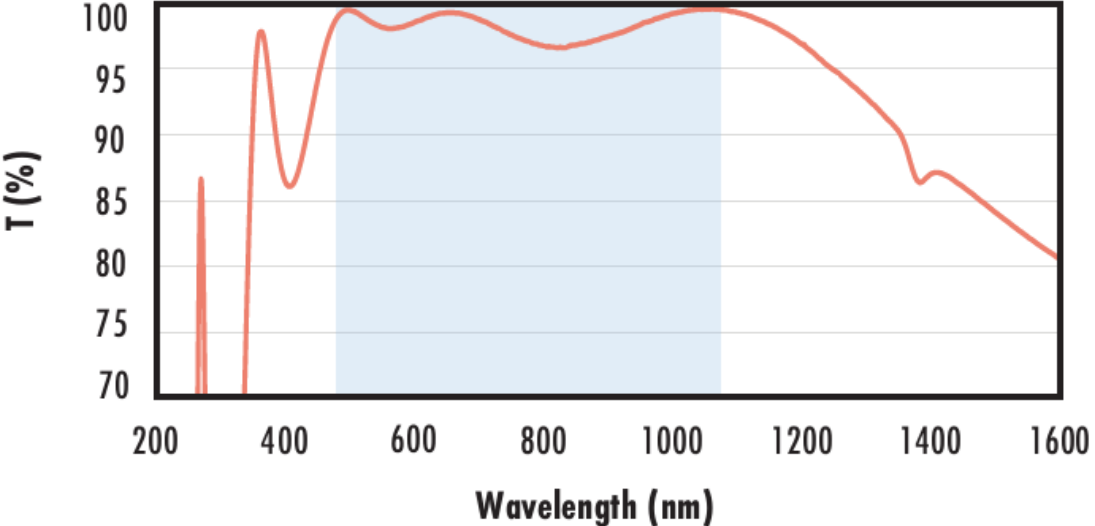
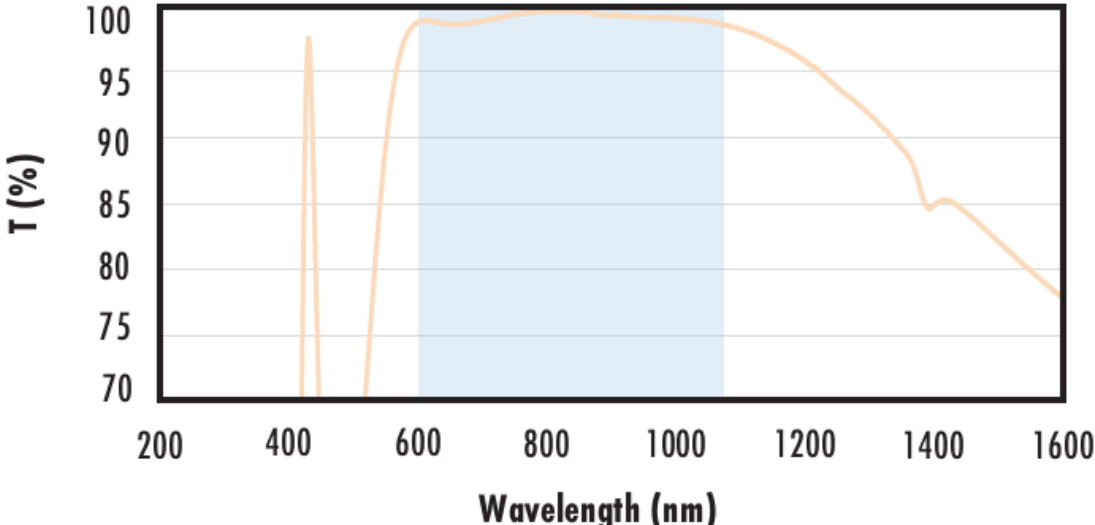
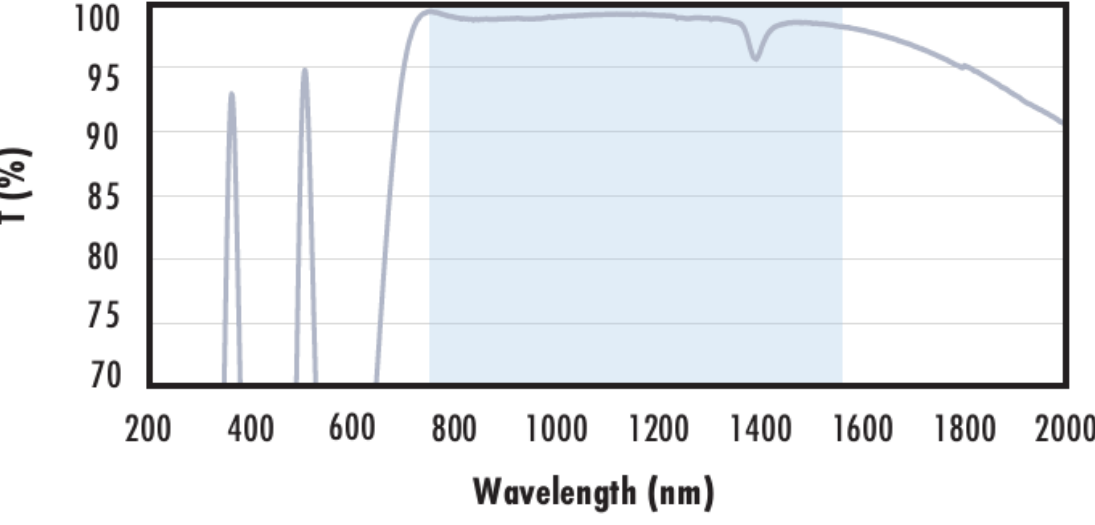
Figure 1 is a line graph showing the transmission spectrum of the proposed photonic crystal. The x-axis represents Wavelength (nm) from 200 to 1200, and the y-axis represents Transmission (T) in percentage (%) from 70 to 100. The curve shows a sharp increase in transmission starting around 300 nm, reaching a plateau near 100% between 400 nm and 700 nm, and then gradually decreasing to about 78% at 1200 nm. A light blue shaded region highlights the transmission band from approximately 350 nm to 700 nm.

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T . I T . . .

Typical Transmission 	Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}$ $R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$ $R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with NIR I Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with NIR II Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 1.5\% \text{ @ } 750 - 800\text{nm}$ $R_{abs} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}$ $R_{avg} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

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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COMPATIBLE MOUNTS