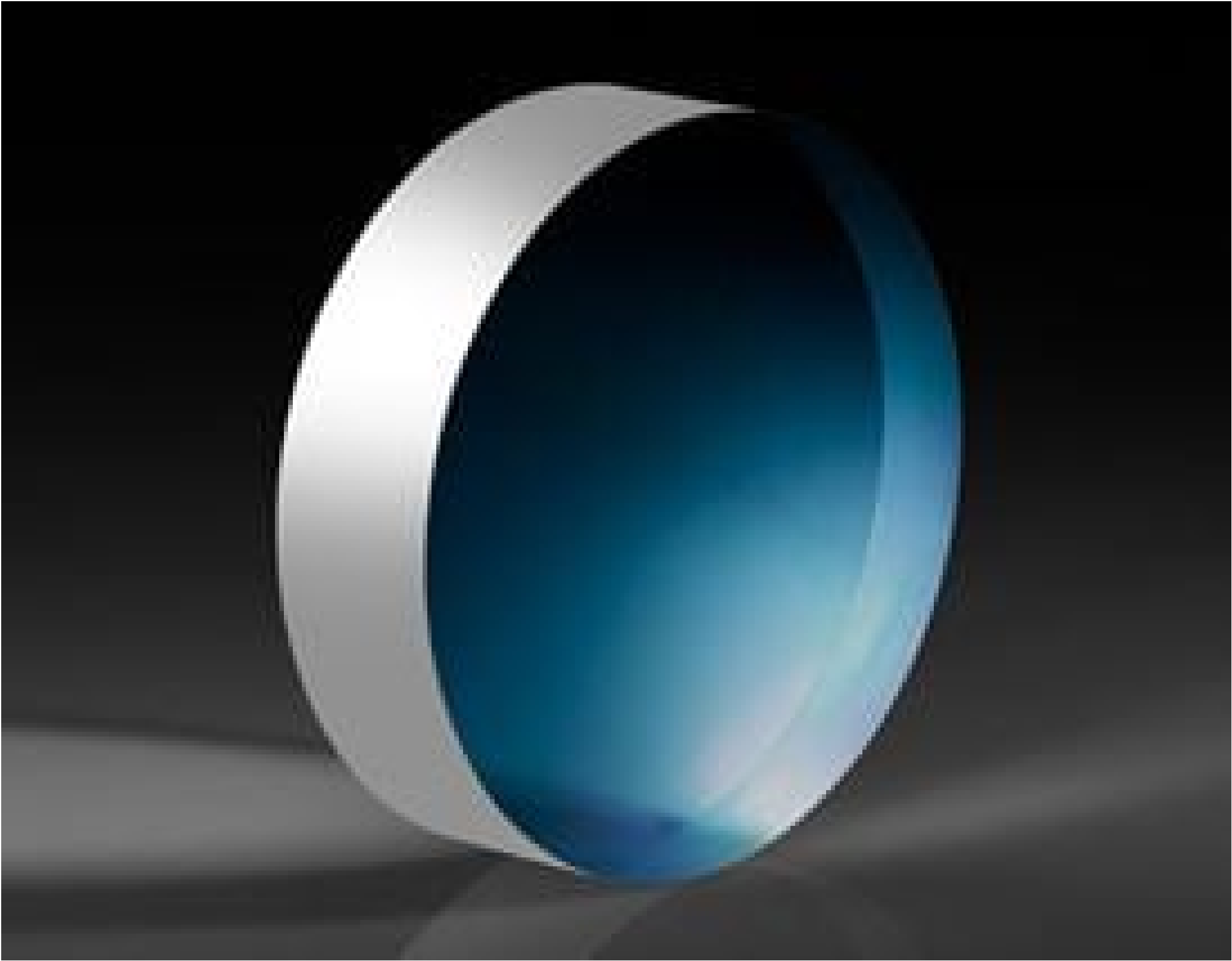


TECHSPEC[®] 40mm Dia. 4mm Thick NIR I, 1λ Fused Silica Window



Stock **#36-983** 3 In Stock

-

1

+

A\$225^{.60}

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Volume Pricing	
Qty 1-5	A\$225.60 each
Qty 6-25	A\$179.20 each
Qty 26-49	A\$168.00 each
Need More?	Request Quote

Product Downloads

General

Type:

Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):

36.00

Diameter (mm):

40.00 +0.00/-0.20

4.00 ±0.38	Thickness (mm):
<5	Parallelism (arcmin):
+0.00/-0.20	Dimensional Tolerance (mm):
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

NIR I (600-1050nm)	Coating:
Fused Silica (Corning 7980)	Substrate: □
1.458	Index of Refraction (n _d):
60-40	Surface Quality:
67.8	Abbe Number (v _d):
R _{avg} ≤0.5% @ 600 - 1050nm	Coating Specification:
600 - 1050	Wavelength Range (nm):
1λ	Surface Flatness (P-V):
7 J/cm² @ 1064nm, 10ns	Damage Threshold, Reference: □

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 235:

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 with Broadband Anti-Reflection Coatings
- Ideal for Cost Sensitive Broadband Applications
- Circular and Square Sizes from 5mm to 100mm
- [λ/4](#) or [λ/10](#) UV Fused Silica Windows Also Available

Note: New additions to this product family may be specified with a transmitted wavefront distortion (TWD) specification instead of a surface flatness. For more information on the difference between these two specifications, see our application note on [Understanding Optical Windows](#).

Transmittance UV-Grade Fused Silica
(10mm Thickness)

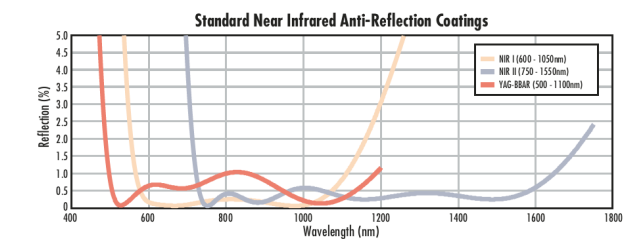
The figure consists of two side-by-side line graphs sharing a common y-axis labeled "Transmittance - (%)" ranging from 0 to 100 in increments of 20.

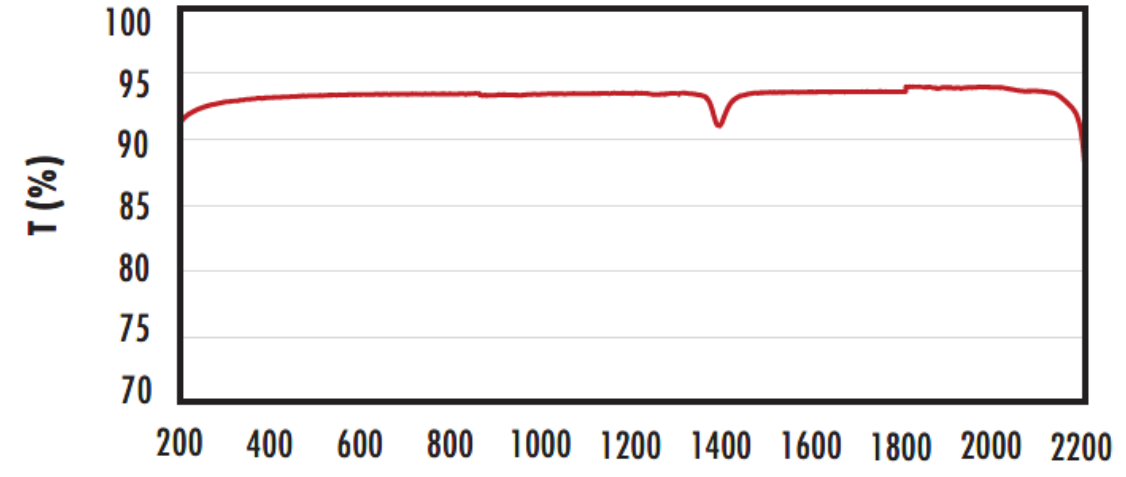
The left graph has an x-axis labeled "Wavelength (nanometers)" ranging from 150 to 300 in increments of 50. The curve shows transmittance starting at 0% at 150 nm, rising sharply to about 80% at 175 nm, and then leveling off to approximately 90% at 200 nm, remaining constant up to 300 nm.

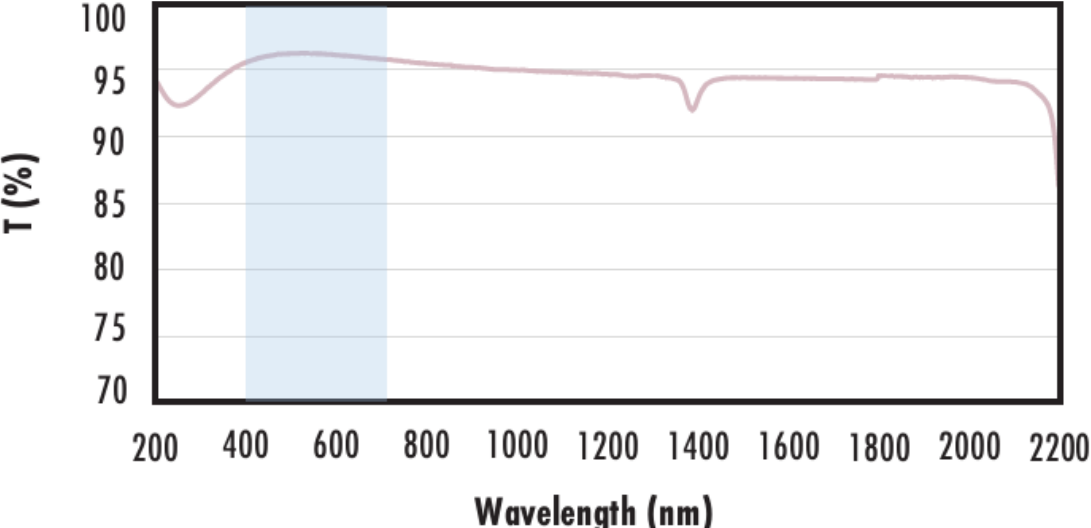
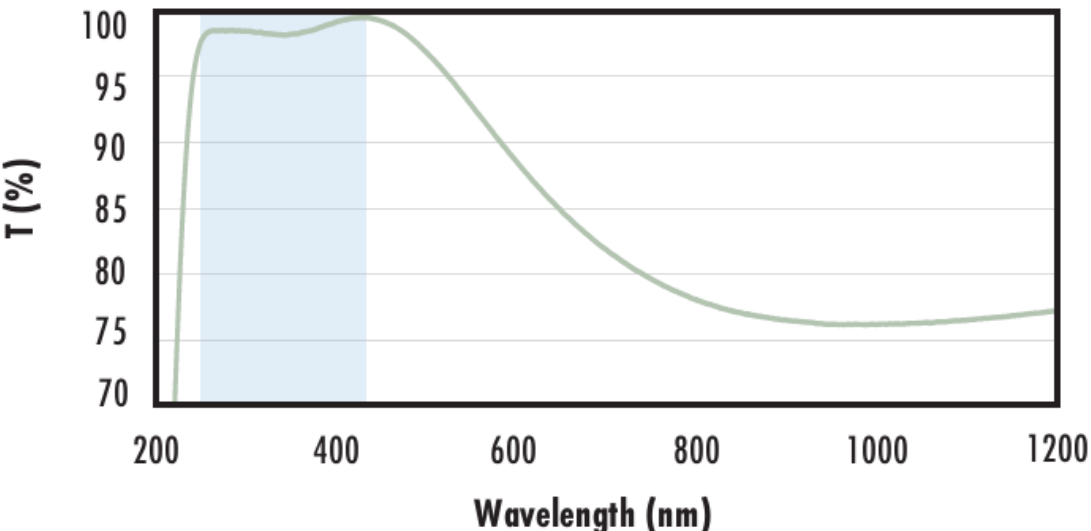
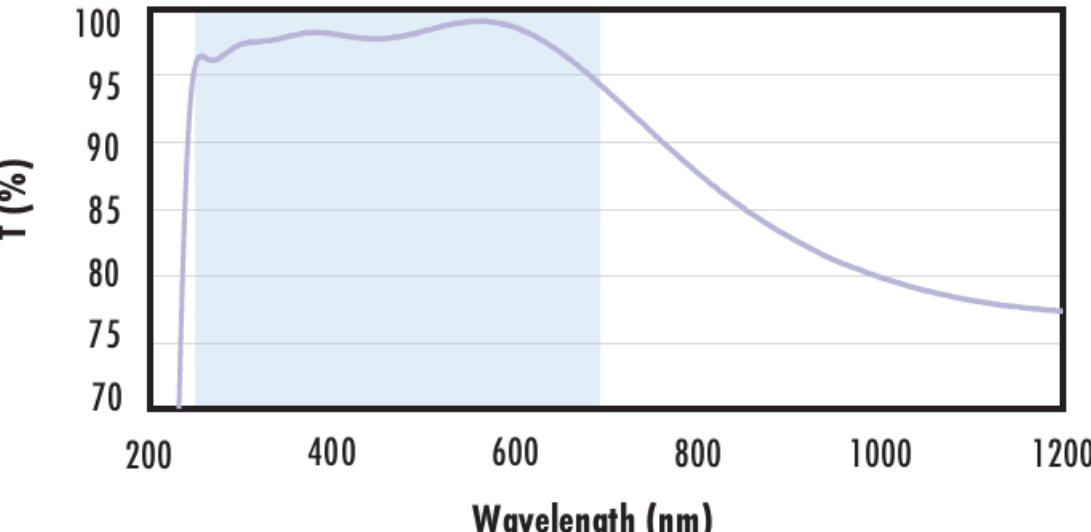
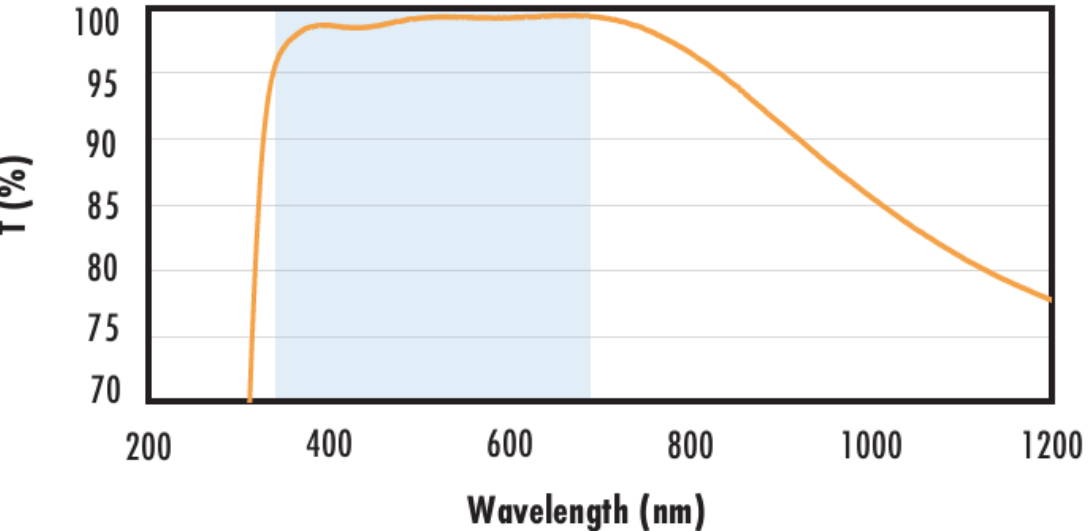
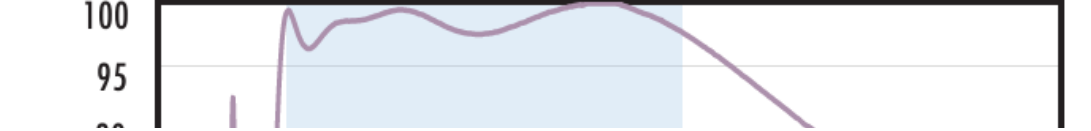
The right graph has an x-axis labeled "Wavelength (microns)" ranging from 1 to 5 in increments of 1. The curve shows high transmittance (near 100%) from 1 to 1.8 microns, followed by a sharp absorption peak (transmittance drop to ~10%) at approximately 1.9 microns. Transmittance then rises to a local maximum of ~85% at 2.5 microns, followed by another sharp absorption peak at approximately 3.3 microns (transmittance drop to ~10%). Transmittance then rises to ~20% at 4 microns and drops to 0% at 5 microns.

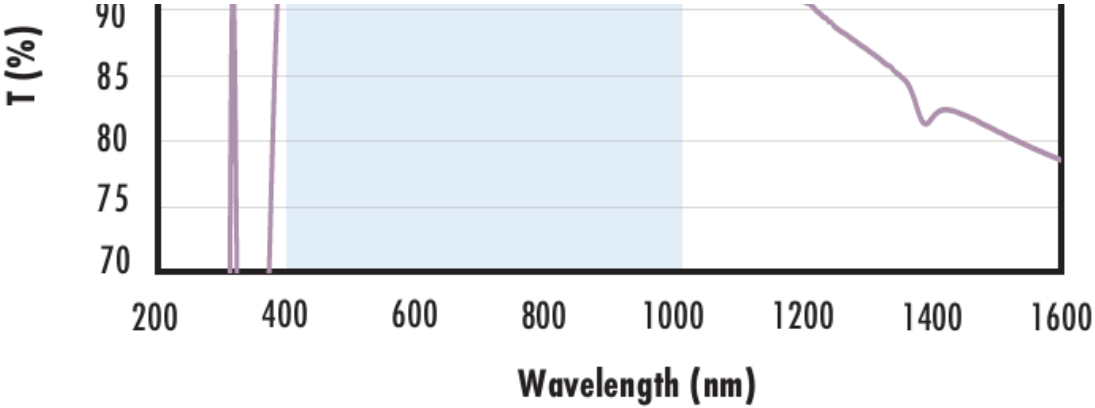
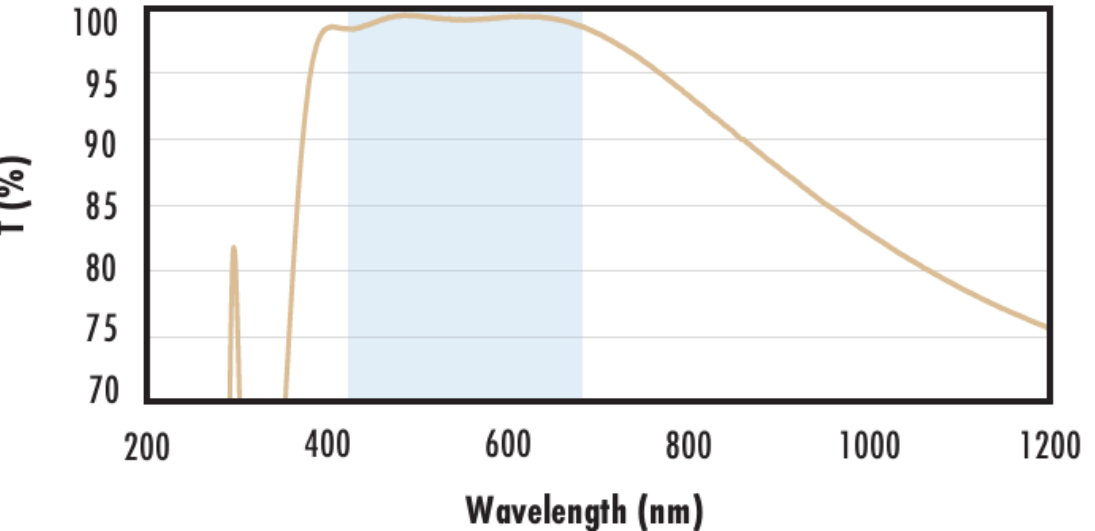
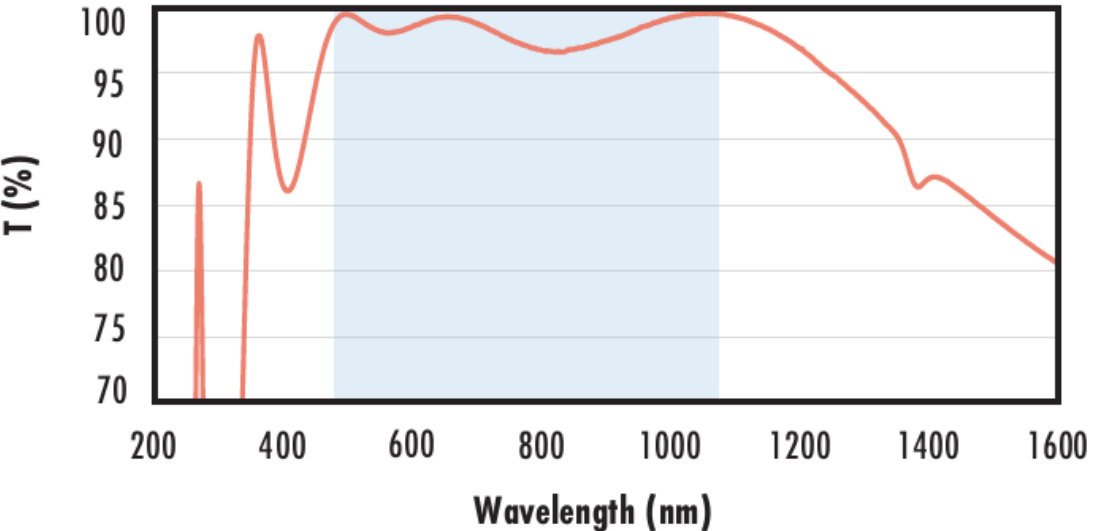
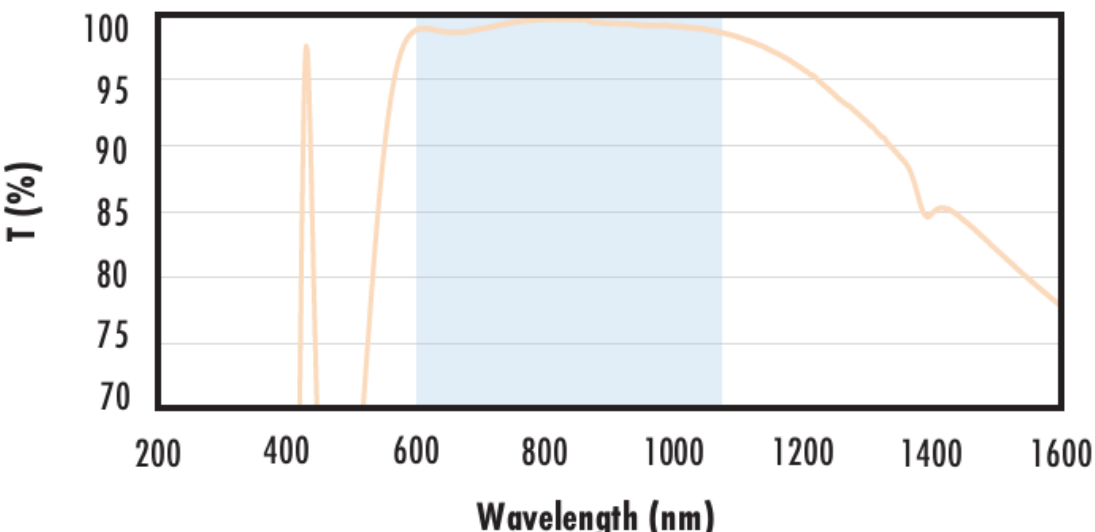
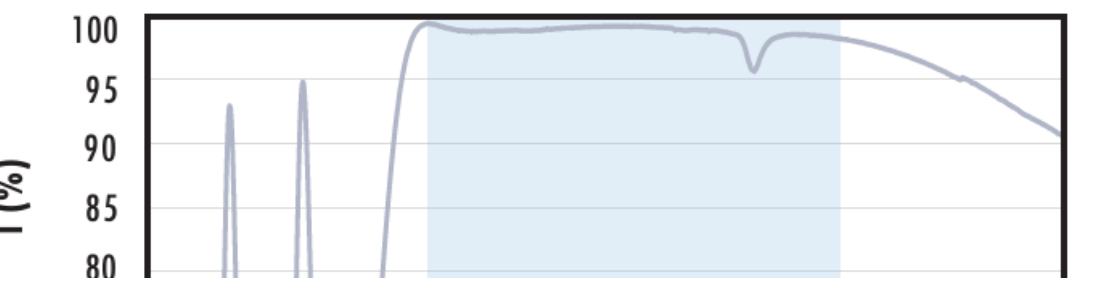
Figure 1 is a line graph titled "Anti-Reflective Coating Curves". The y-axis is labeled "Reflectance (%)" and ranges from 0 to 2.5 with major grid lines every 0.5 units. The x-axis is labeled "Wavelength (nm)" and ranges from 200 to 1000 with major grid lines every 100 units. There are three data series represented by colored lines: a blue line for "UV-AR", a red line for "UV-VIS", and a green line for "VIS-NIR". The blue line starts at approximately 1.6% reflectance at 200 nm, drops to a minimum of about 0.1% at 350 nm, and then rises sharply to 2.5% at 500 nm. The red line starts at 2.5% at 200 nm, drops to a minimum of about 0.1% at 300 nm, and then rises to 2.2% at 700 nm. The green line starts at 2.5% at 350 nm, drops to a minimum of about 0.1% at 400 nm, and then rises to 1.2% at 1000 nm.

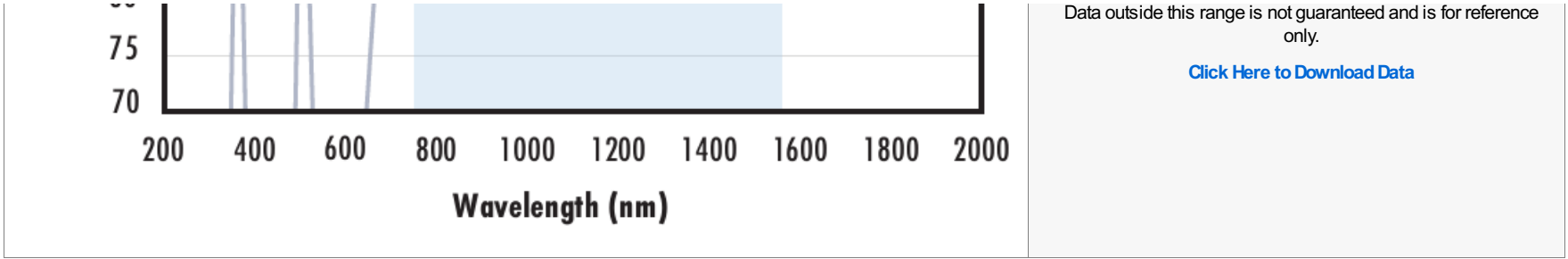
Wavelength (nm)	UV-AR Reflectance (%)	UV-VIS Reflectance (%)	VIS-NIR Reflectance (%)
200	1.6	2.5	-
300	0.2	0.1	-
350	0.1	0.3	2.5
400	0.2	0.1	0.1
500	2.5	0.8	0.3
600	-	0.4	0.5
700	-	2.2	0.9
800	-	-	0.4
900	-	-	0.1
1000	-	-	1.2



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:

	Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 0.25\% @ 880nm$ $R_{avg} \leq 1.25\% @ 400 - 870nm$ $R_{avg} \leq 1.25\% @ 890 - 1000nm$ 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 with VIS 0° (425-675nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.4\% @ 425 - 675nm$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with YAG-BBAR Coating 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: $R_{abs} \leq 0.25\% @ 532nm$ $R_{abs} \leq 0.25\% @ 1064nm$ $R_{avg} \leq 1.0\% @ 500 - 1100nm$ 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: $R_{avg} \leq 0.5\% @ 600 - 1050nm$ 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: $R_{abs} \leq 1.5\% @ 750 - 800nm$ $R_{abs} \leq 1.0\% @ 800 - 1550nm$ $R_{avg} \leq 0.7\% @ 750 - 1550nm$



Compatible Mounts

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