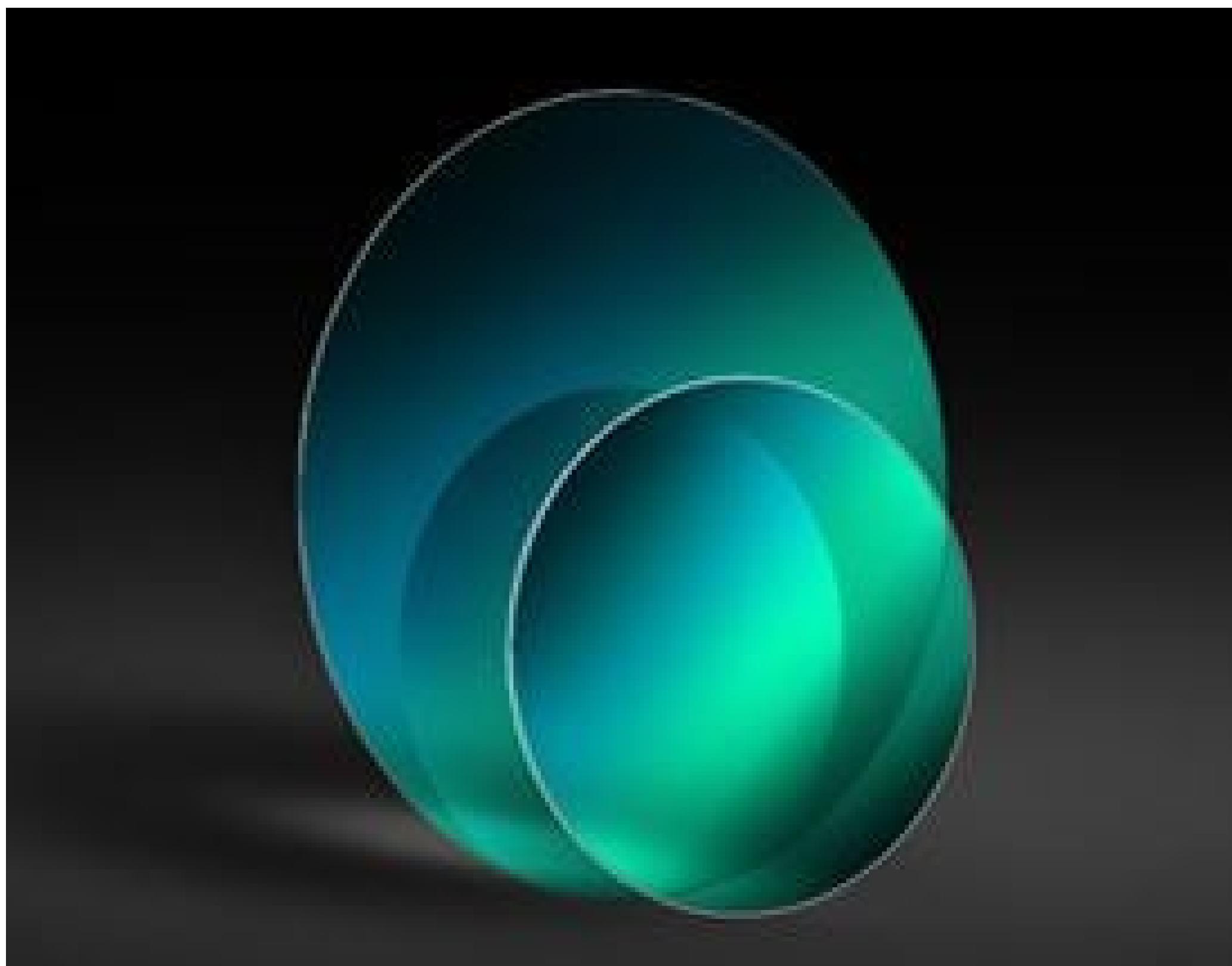


TECHSPEC® 12.5mm Diameter VIS-NIR Coated, Ultra-Thin N-BK7 WindowSee More by [SCHOTT Optical Components](#)

Ultra-Thin N-BK7 Windows

Stock #22-038 **12 In Stock** £104^{.00}**ADD TO CART**

Volume Pricing	
Qty 1-5	£104.00 each
Qty 6-25	£81.60 each
Qty 26-49	£78.80 each
Need More?	Request Quote

● Prices shown are exclusive of VAT/local taxes**Product Downloads****SPECIFICATIONS****General**

Type:

Protective Window

Physical & Mechanical Properties

Bevel:	Protective as needed
Clear Aperture CA (mm):	11.25
Diameter (mm):	12.50 +0.00/-0.10
Thickness (mm):	0.20 ±0.025
Edges:	Fine Ground
Knoop Hardness (kg/mm ²):	610.00
Parallelism (arcsec):	<30
Poisson's Ratio:	0.21
Young's Modulus (GPa):	82

Optical Properties

Abbe Number (ν _d):	64.17
Coating:	VIS-NIR (400-1000nm)
Coating Specification:	$R_{abs} \leq 0.25\% @ 880\text{nm}$ $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$
Index of Refraction (n _d):	1.516
Substrate:	N-BK7
Surface Quality:	20-10
Transmitted Wavefront, P-V:	λ/2
Wavelength Range (nm):	400 - 1000
Damage Threshold, By Design:	5 J/cm ² @ 532nm, 10ns

Material Properties

Coefficient of Thermal Expansion CTE (10 ⁻⁶ °C):	7.1 (-30 to +70°C) 8.3 (+20 to +300°C)
Density (g/cm ³):	2.51

Regulatory Compliance

RoHS 2015:	Compliant
Certificate of Conformance:	View
Reach 235:	Compliant

PRODUCT DETAILS

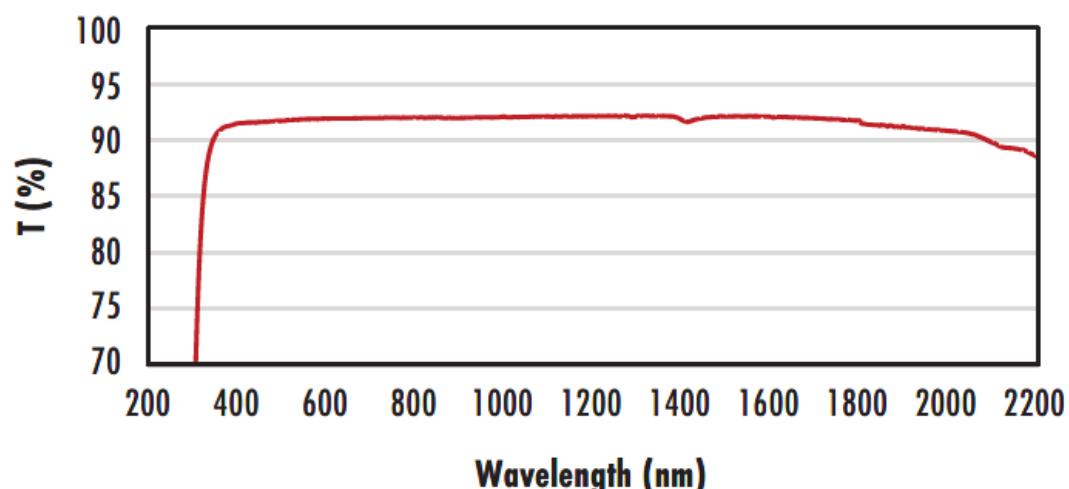
- Ultra-Thin 0.20mm Thickness
- Precision N-BK7 Substrate
- Extremely Lightweight

TECHSPEC® Ultra-Thin N-BK7 Windows are our thinnest windows available and are at least 1/10 the thickness of our traditional N-BK7 windows. Their extremely thin designs make them ideal for both weight and size-sensitive applications. Additionally, their high tolerance design yields minimal beam distortion and scatter. TECHSPEC® Ultra-Thin N-BK7 Windows are available uncoated or with a MgF₂ anti-reflection coating. For custom sizes or coating options, please contact our [Sales Department](#).

Note: The Ultra-Thin N-BK7 Windows are very fragile. Handle these windows with care.

TECHNICAL INFORMATION

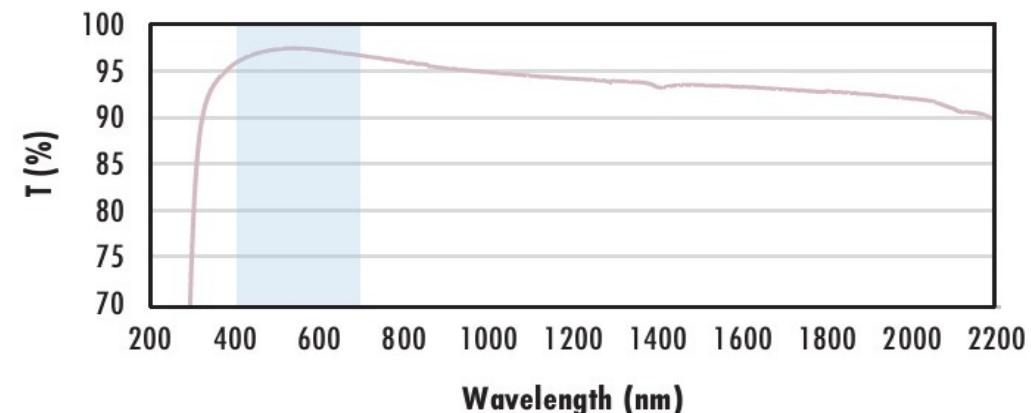
Uncoated N-BK7 Typical Transmission



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV-NIR spectra.

[Click Here to Download Data](#)

N-BK7 with MgF_2 Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF_2 (400-700nm) coating at 0° AOI.

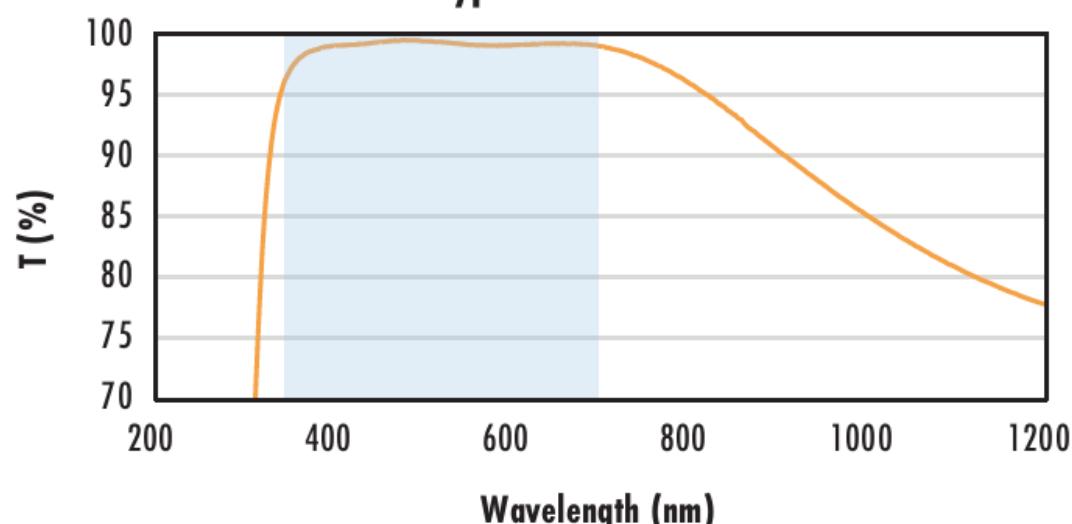
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

N-BK7 with VIS-EXT Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

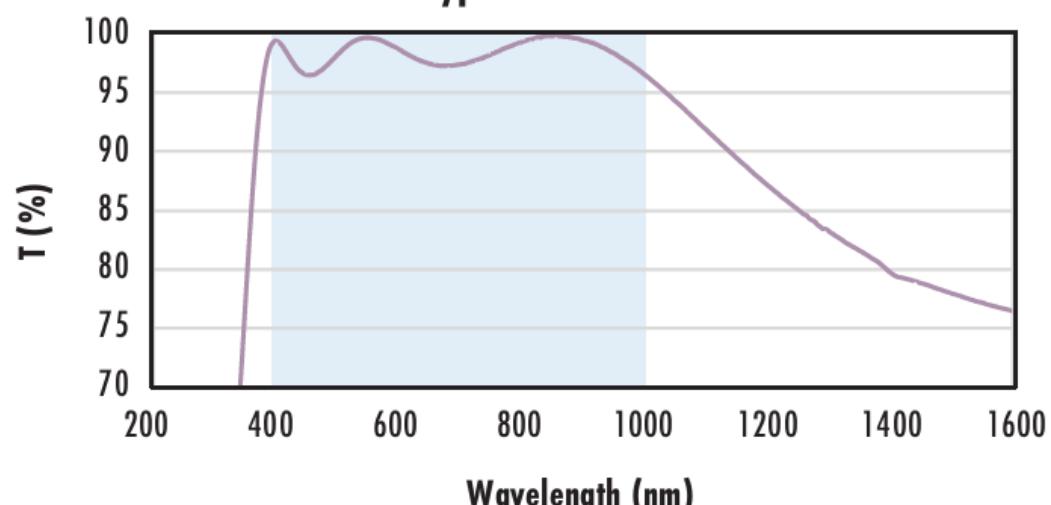
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

N-BK7 with VIS-NIR Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

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

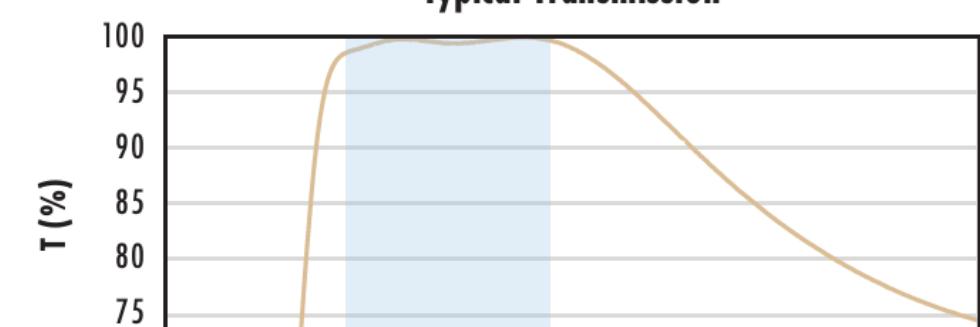
$R_{\text{avg}} \leq 1.25\% @ 400 - 870\text{nm}$

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

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

[Click Here to Download Data](#)

N-BK7 with VIS 0° Coating Typical Transmission



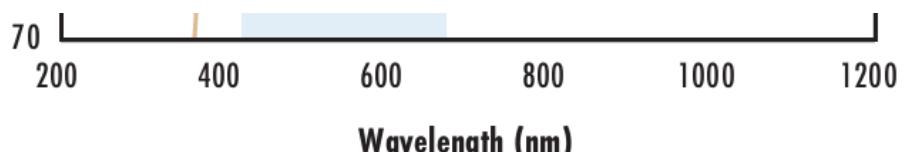
Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

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

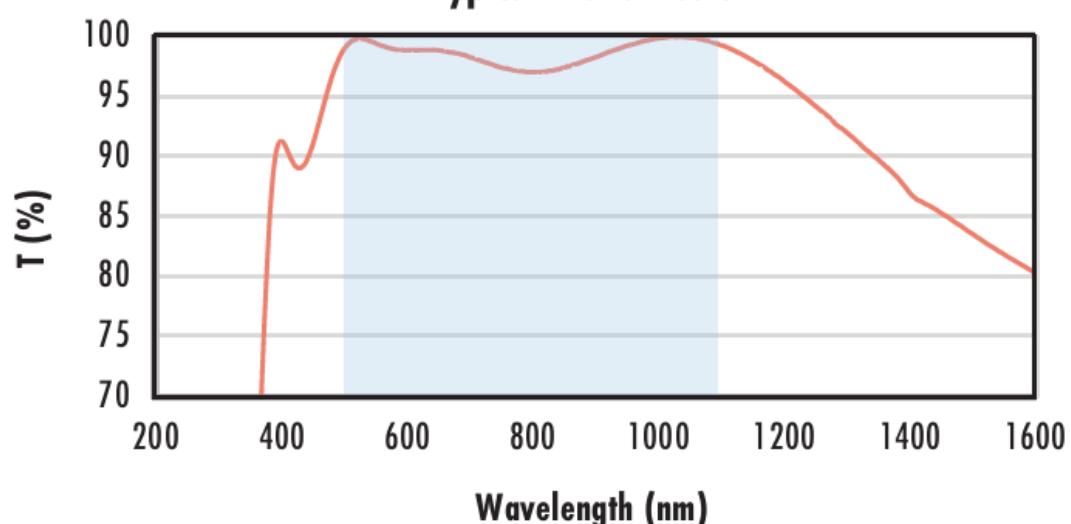
$R_{\text{avg}} \leq 0.4\% @ 425 - 675\text{nm}$

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

[Click Here to Download Data](#)



N-BK7 with YAG-BBAR Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

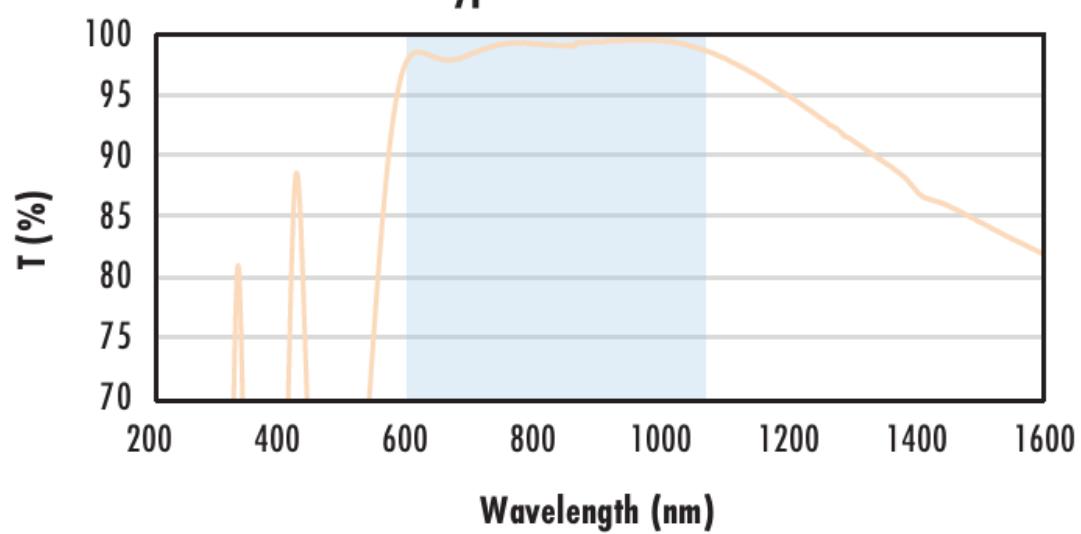
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$\begin{aligned} R_{abs} &\leq 0.25\% @ 532\text{nm} \\ R_{abs} &\leq 0.25\% @ 1064\text{nm} \\ R_{avg} &\leq 1.0\% @ 500 - 1100\text{nm} \end{aligned}$$

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

[Click Here to Download Data](#)

N-BK7 with NIR I Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

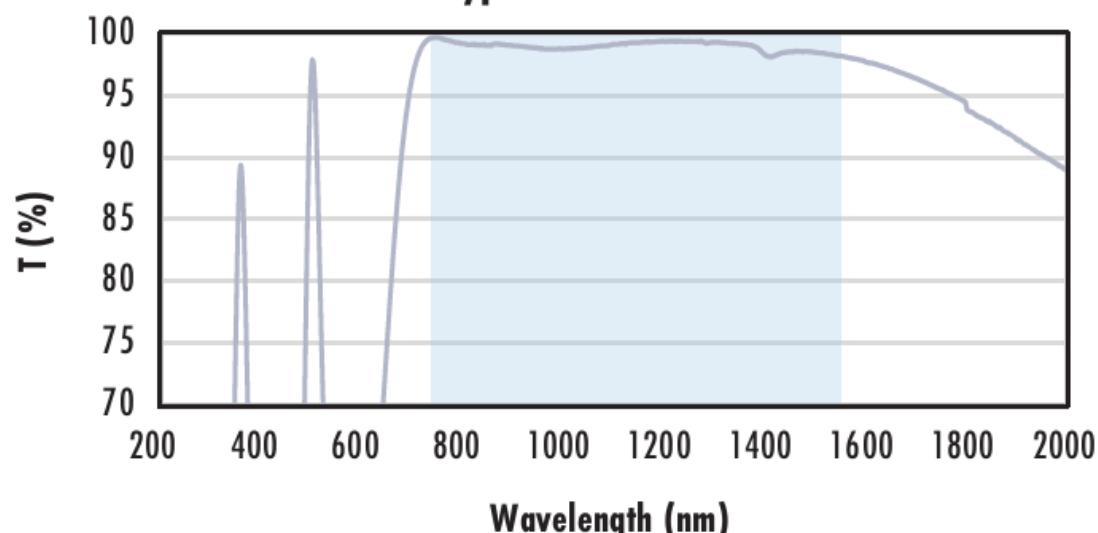
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}$$

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

[Click Here to Download Data](#)

N-BK7 with NIR II Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

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

$$\begin{aligned} R_{abs} &\leq 1.5\% @ 750 - 800\text{nm} \\ R_{abs} &\leq 1.0\% @ 800 - 1550\text{nm} \\ R_{avg} &\leq 0.7\% @ 750 - 1550\text{nm} \end{aligned}$$

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

[Click Here to Download Data](#)

COATING CURVES

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](#).

COMPATIBLE MOUNTS

