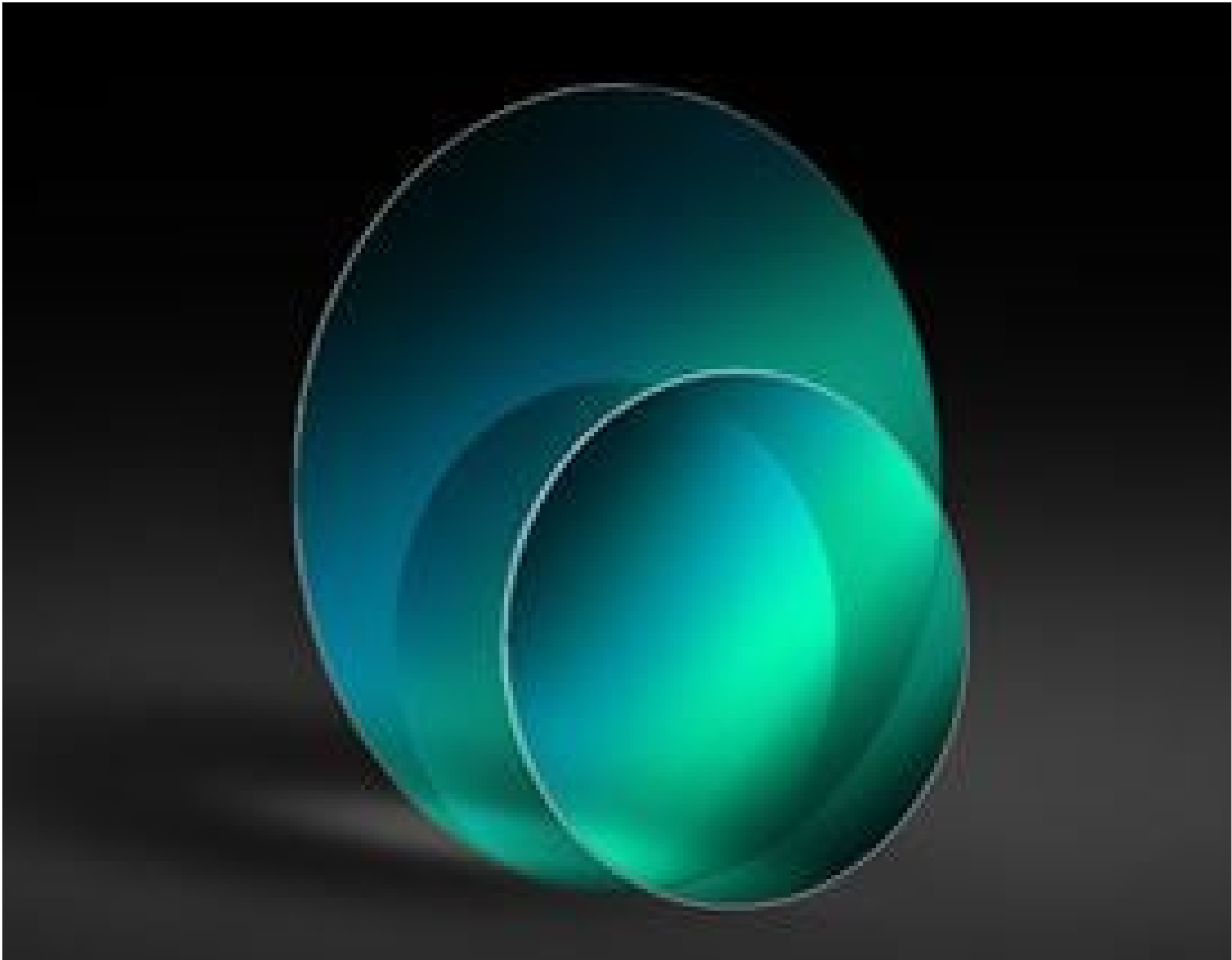


TECHSPEC® 50mm Diameter NIR I, Ultra-Thin N-BK7 Window

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Ultra-Thin N-BK7 Windows

Stock **#22-051** **8 In Stock**

-

1

+

₹15,037

ADD TO CART

Volume Pricing	
Qty 1-5	₹15,037 each
Qty 6-25	₹11,736 each
Qty 26-49	₹11,296 each
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General

Type:

Protective Window

Physical & Mechanical Properties

Bevel:

Protective as needed

Clear Aperture CA (mm):

45.00	
	Diameter (mm):
50.00 +0.00/-0.10	
	Thickness (mm):
0.20 ±0.025	
	Edges:
Fine Ground	
	Knoop Hardness (kg/mm²):
610.00	
	Parallelism (arcsec):
<30	
	Poisson's Ratio:
0.21	
	Young's Modulus (GPa):
82	

Optical Properties	
	Abbe Number (v _d):
64.17	
	Coating:
NIR I (600-1050nm)	
	Coating Specification:
R _{avg} ≤0.5% @ 600 - 1050nm	
	Index of Refraction (n _d):
1.516	
	Substrate:
N-BK7	
	Surface Quality:
40-20	
	Transmitted Wavefront, P-V:
λ/2	
	Wavelength Range (nm):
600 - 1050	
	Damage Threshold, By Design: □
7 J/cm² @ 1064nm, 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/cm³):
2.51	

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

Product Details

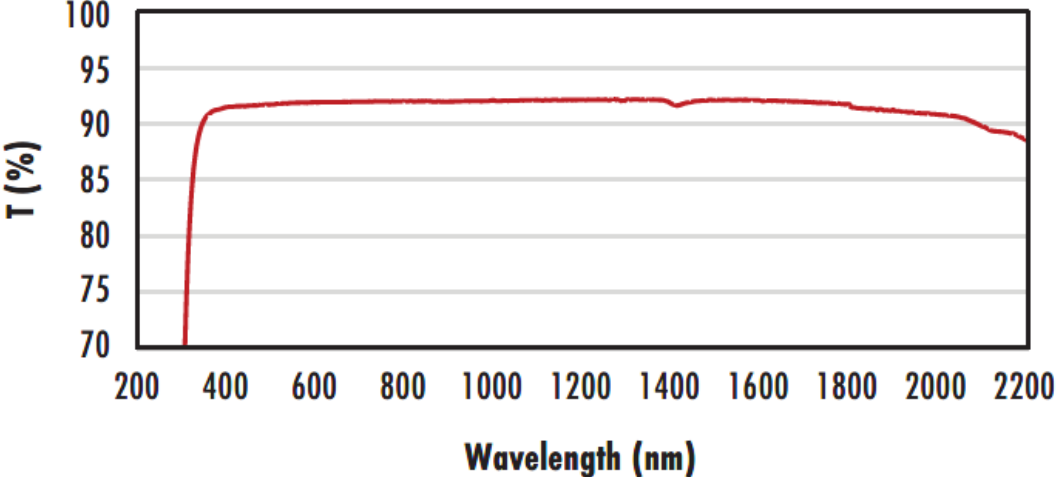
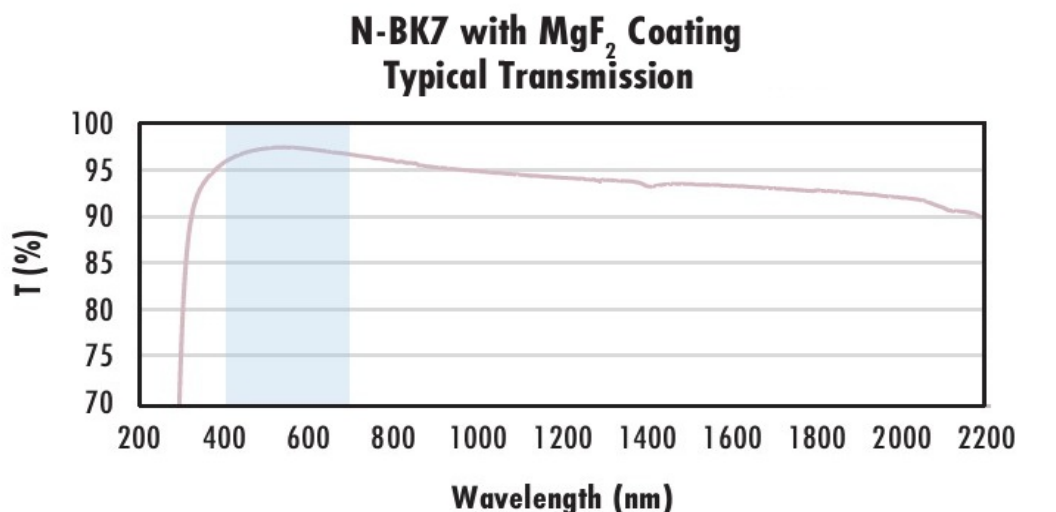
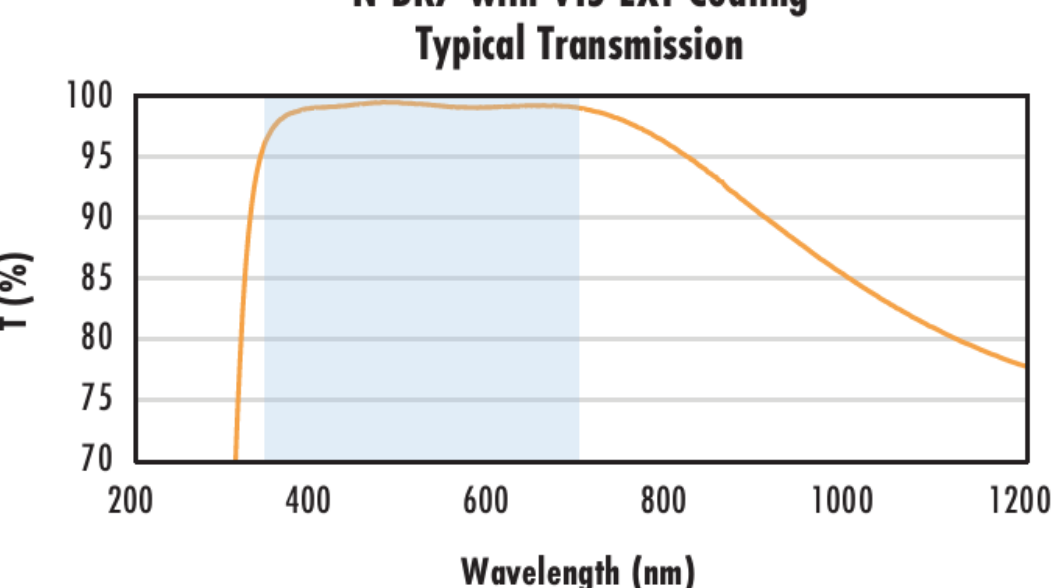
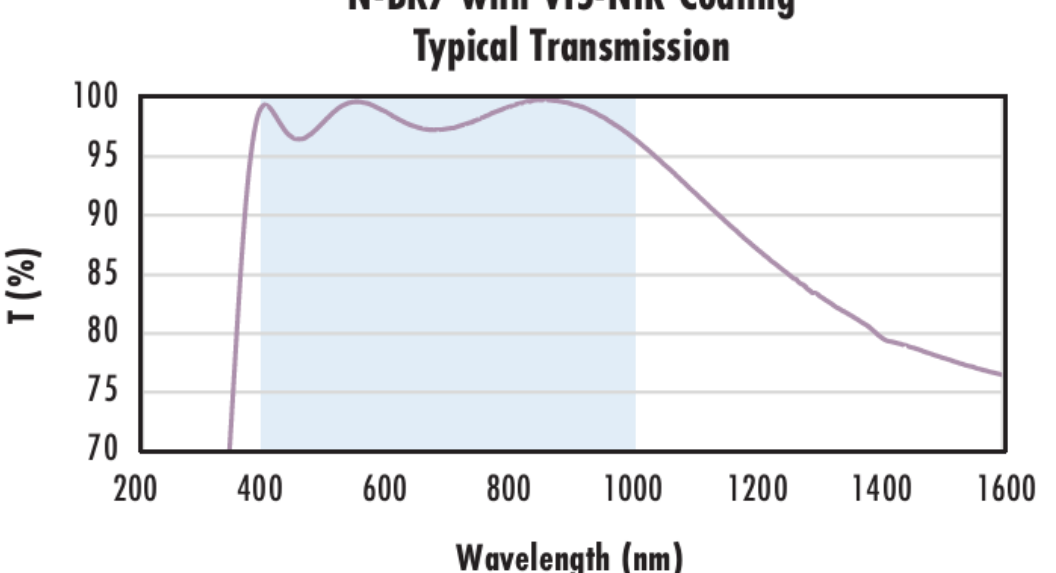
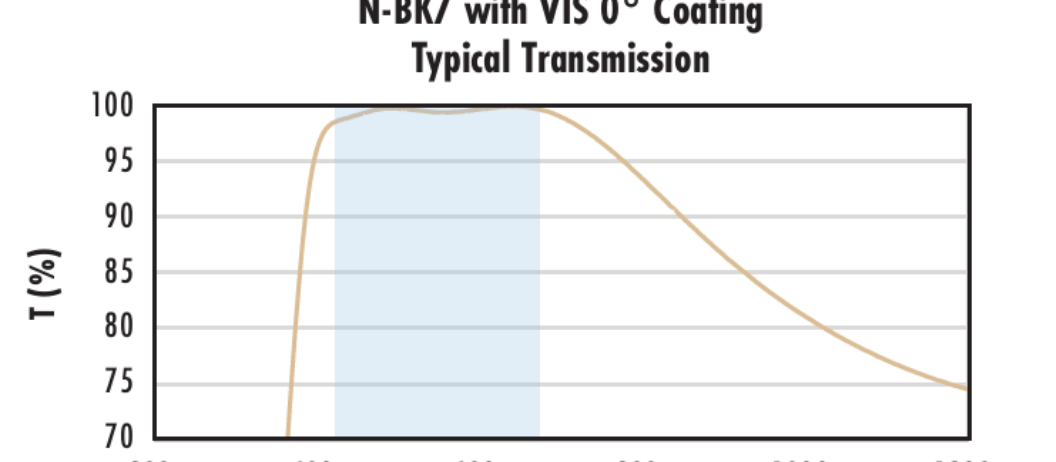
- Ultra-Thin 0.20mm Thickness
- Precision N-BK7 Substrate
- Extremely Lightweight

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

N-BK7	
Uncoated N-BK7 Typical Transmission	

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 MgF₂ Coating Typical Transmission 	Typical transmission of a 3mm thick N-BK7 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
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: $R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$ 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: $R_{abs} \leq 0.25\% @ 880\text{nm}$ $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
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: $R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

