

TECHSPEC® 25mm Dia. x 40mm FL VIS-EXT Coated, Double-Convex LensStock #89-178 **1 In Stock**[Other Coating Options](#) A\$90^{.40}**ADD TO CART**

Volume Pricing	
Qty 1-9	A\$90.40 each
Qty 10-24	A\$80.80 each
Qty 25-99	A\$72.40 each
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SPECIFICATIONS**General**

Type:

Physical & Mechanical Properties

25.00 +0.000/-0.025	Diameter (mm):
<1	Centering (arcmin):
Protective as needed	Bevel:
5.30	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
1.34	Edge Thickness ET (mm):
24.00	Clear Aperture CA (mm):

Optical Properties

38.21	Back Focal Length BFL (mm):
40.00	Effective Focal Length EFL (mm):
MS-EXT (350-700nm)	Coating:
R _{avg} <0.5% @ 350 - 700nm	Coating Specification:
N-BK7	Substrate:
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
40.42	Radius R ₁ =R ₂ (mm):
1.6	f#:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
0.31	Numerical Aperture NA:
350 - 700	Wavelength Range (nm):

Regulatory Compliance

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

PRODUCT DETAILS

- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm

- Minimize Aberrations Including Spherical and Coma

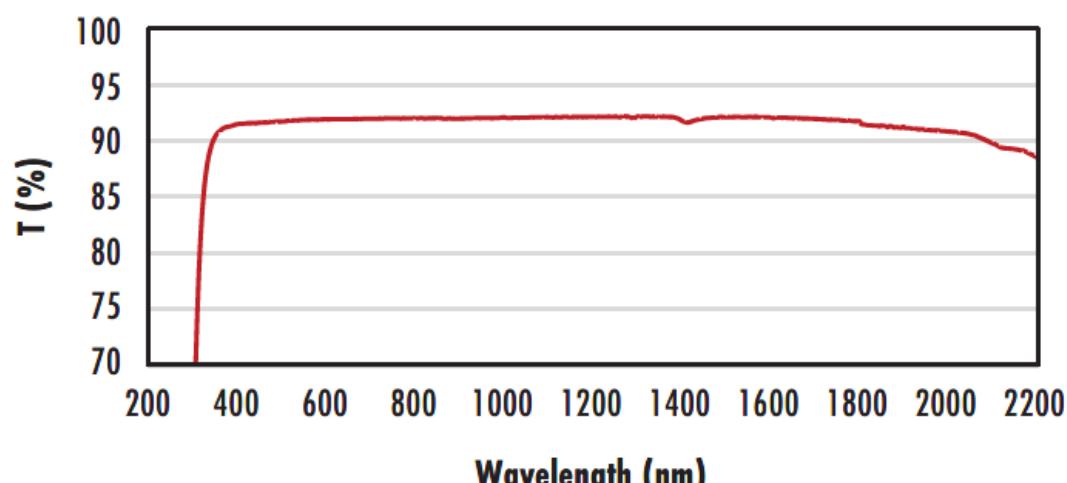
- UV Fused Silica DCX Lenses** Available

- Other Coating Options Available: **Uncoated**, **MgF₂**, **VIS 0°**, **NIR I**, **NIR II**, **VIS-NIR**, and **YAG-BBAR**

TECHSPEC® MS-EXT Coated Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) between 0.2 and 5. At a conjugate ratio of 1, aberrations such as spherical aberration, chromatic aberration, coma, and distortion are minimized or cancelled due to the symmetric lens design. TECHSPEC MS-EXT Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

TECHNICAL INFORMATION

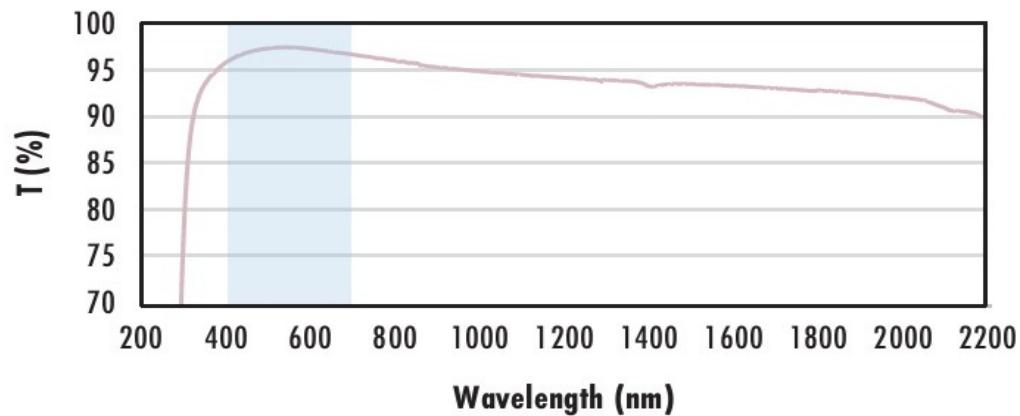
Uncoated N-BK7 Typical Transmission



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

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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.

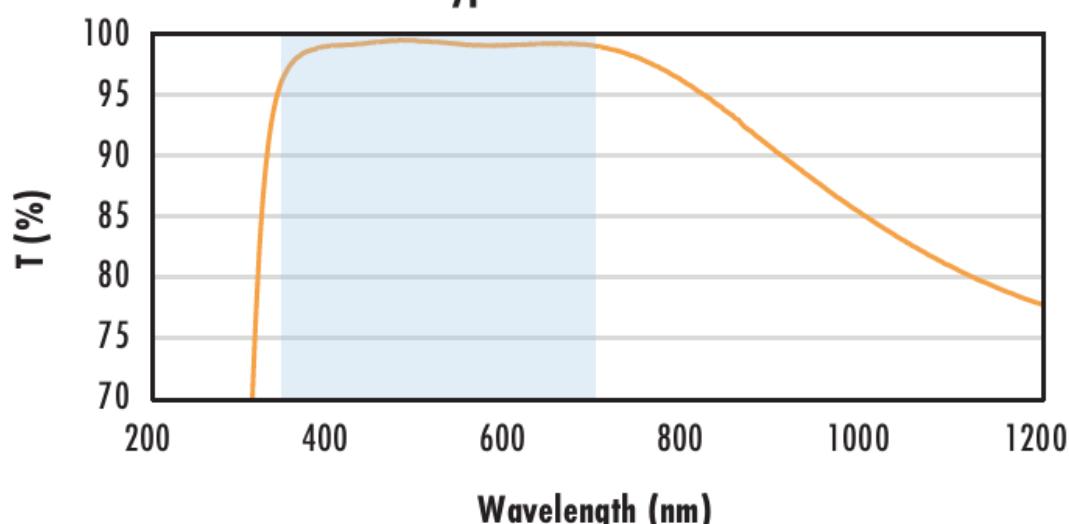
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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.

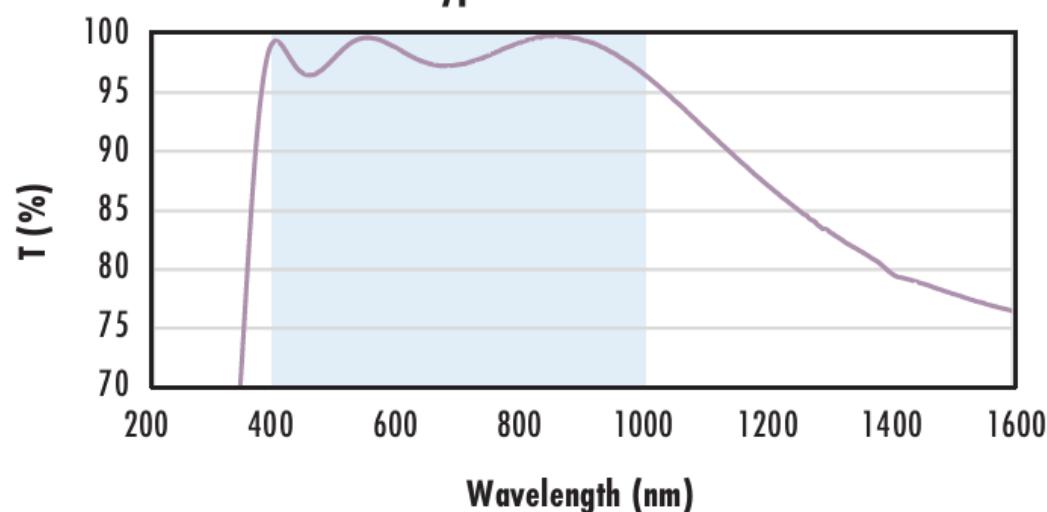
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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:

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

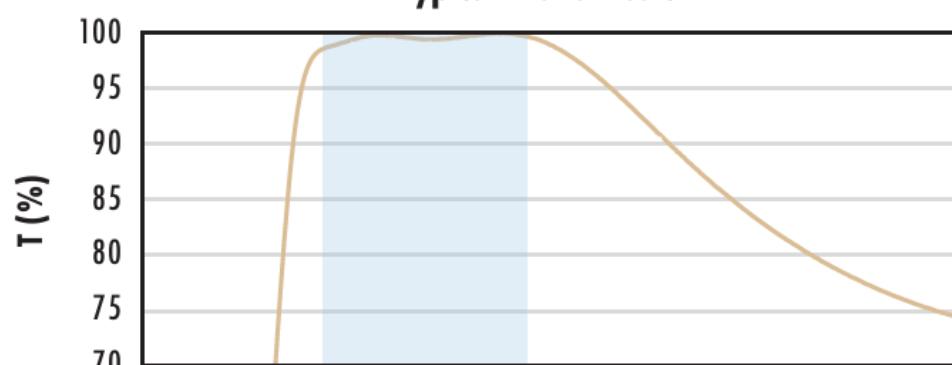
$$R_{\text{avg}} \leq 1.25\% \text{ @ 400 - 870nm}$$

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

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

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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:

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

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

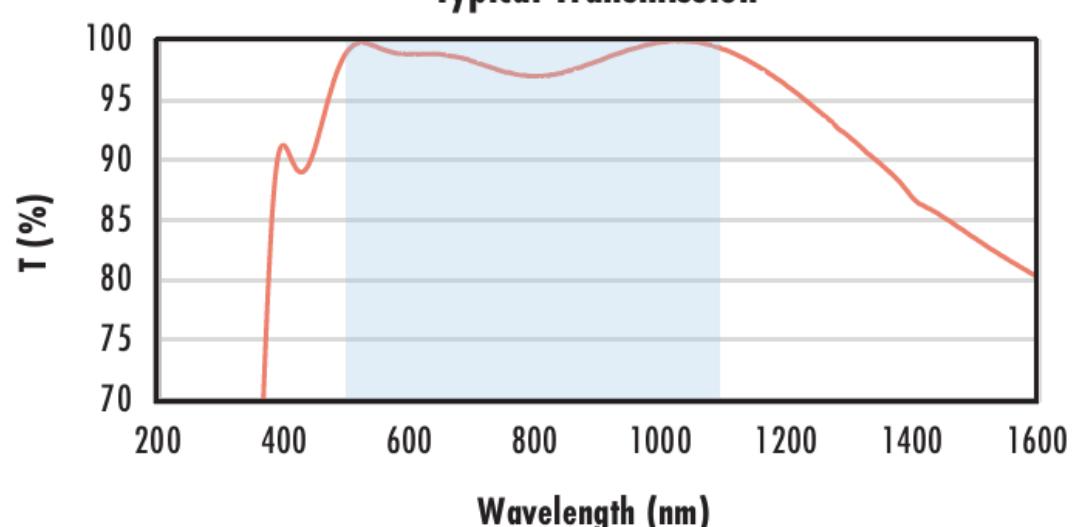
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200 400 600 800 1000 1200

Wavelength (nm)

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:

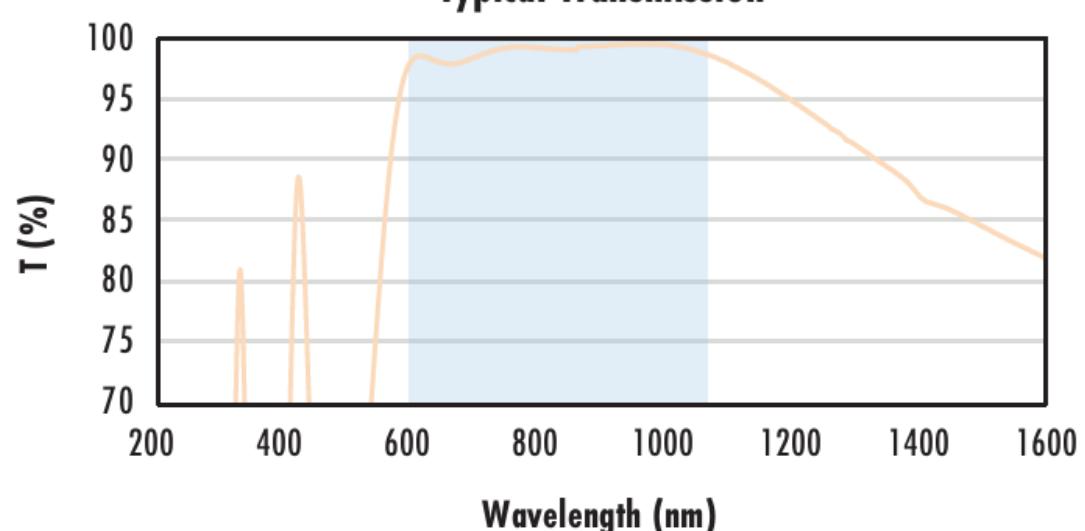
$R_{abs} \leq 0.25\% @ 532nm$
 $R_{abs} \leq 0.25\% @ 1064nm$
 $R_{avg} \leq 1.0\% @ 500 - 1100nm$

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

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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:

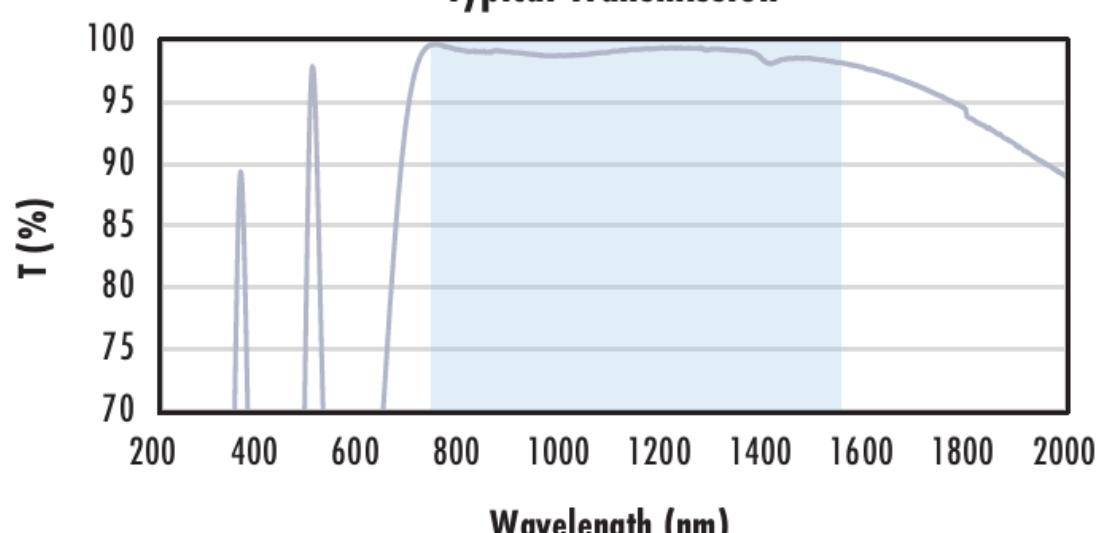
$R_{avg} \leq 0.5\% @ 600 - 1050nm$

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

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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:

$R_{abs} \leq 1.5\% @ 750 - 800nm$
 $R_{abs} \leq 1.0\% @ 800 - 1550nm$
 $R_{avg} \leq 0.7\% @ 750 - 1550nm$

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

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COMPATIBLE MOUNTS