

TECHSPEC[®] 15mm Dia. x 20mm FL, MgF₂ Coated, Double-Convex Lens



Stock **#63-575** **7 In Stock**

[Other Coating Options](#)

-

1

+

€38⁶³

ADD TO CART

Volume Pricing	
Qty 1-9	€38,63 each
Qty 10-24	€34,76 each
Qty 25-99	€30,90 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

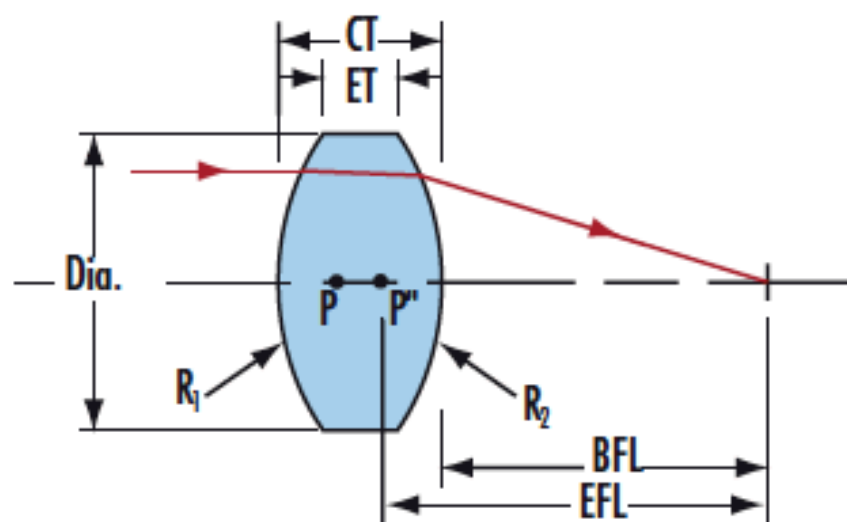
General

Double-Convex Lens		Type:
Physical & Mechanical Properties		
Diameter (mm):		15.00 +0.0/-0.025
Centering (arcmin):		<1
Bevel:		Protective as needed
Center Thickness CT (mm):		3.50
Center Thickness Tolerance (mm):		±0.10
Edge Thickness ET (mm):		1.63
Clear Aperture CA (mm):		14.00
Optical Properties		
Back Focal Length BFL (mm):		18.99
Effective Focal Length EFL (mm):		20.00
Coating:		MgF ₂ (400-700nm)
Coating Specification:		R _{avg} ≤ 1.75% @ 400 - 700nm
Substrate: ☐		N-SF11
Surface Quality:		40-20
Power (P-V) @ 632.8nm:		1.5λ
Irregularity (P-V) @ 632.8nm:		λ/4
Radius R ₁ =R ₂ (mm):		30.60
f/#:		1.33
Focal Length Specification Wavelength (nm):		587.6
Focal Length Tolerance (%):		±1
Numerical Aperture NA:		0.38
Wavelength Range (nm):		400 - 700
Damage Threshold, By Design: ☐		10 J/cm ² @ 532nm, 10ns
Regulatory Compliance		
RoHS 2015:		Compliant
Certificate of Conformance:		View
Reach 235:		Compliant

PRODUCT DETAILS

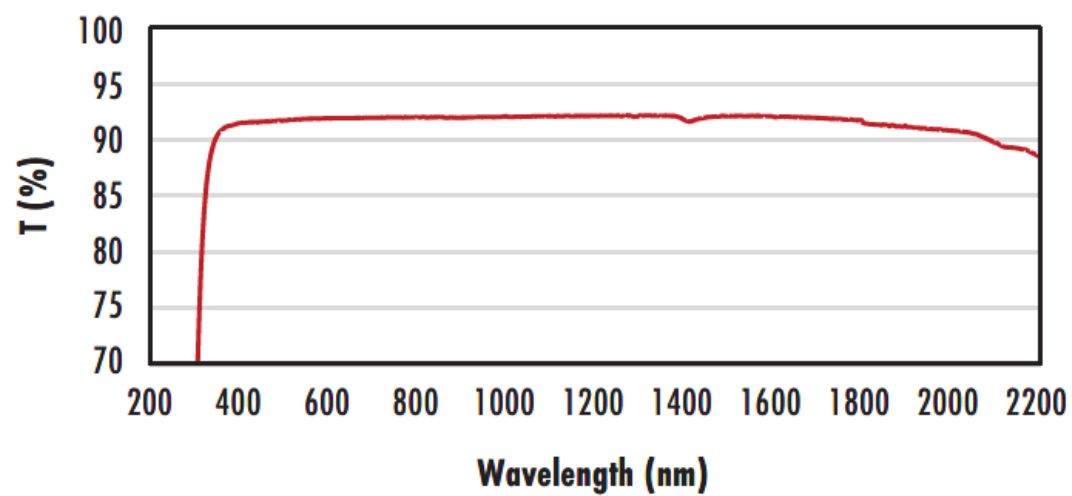
- AR Coated to Provide <1.75% Reflectance per Surface for 400 - 700nm
 - Minimize Aberrations Including Spherical and Coma
 - [UV Fused Silica DCX Lenses](#) Available
 - Other Coating Options Available: [Uncoated](#), [VIS 0°](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), [VIS-NIR](#), and [YAG-BBAR](#)
- TECHSPEC® MgF₂ 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® MgF₂ Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

TECHNICAL INFORMATION



N-BK7

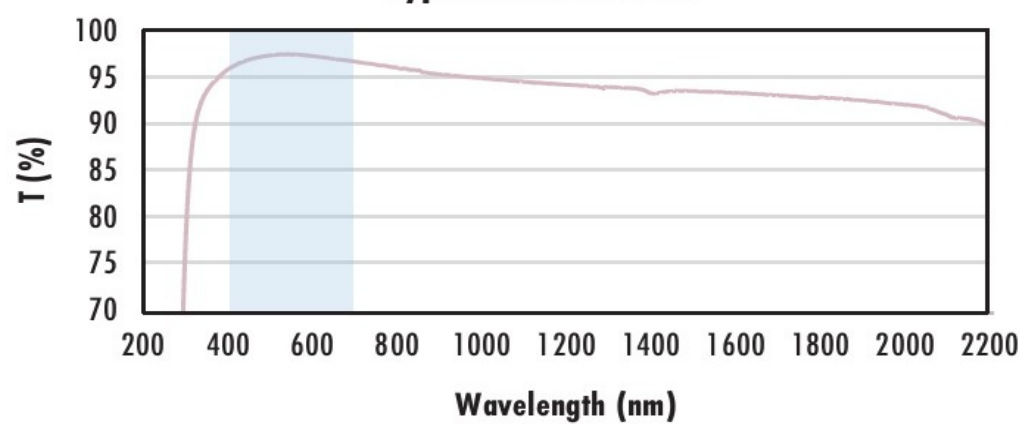
Uncoated N-BK7 Typical Transmission



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

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N-BK7 with MgF₂ Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI.

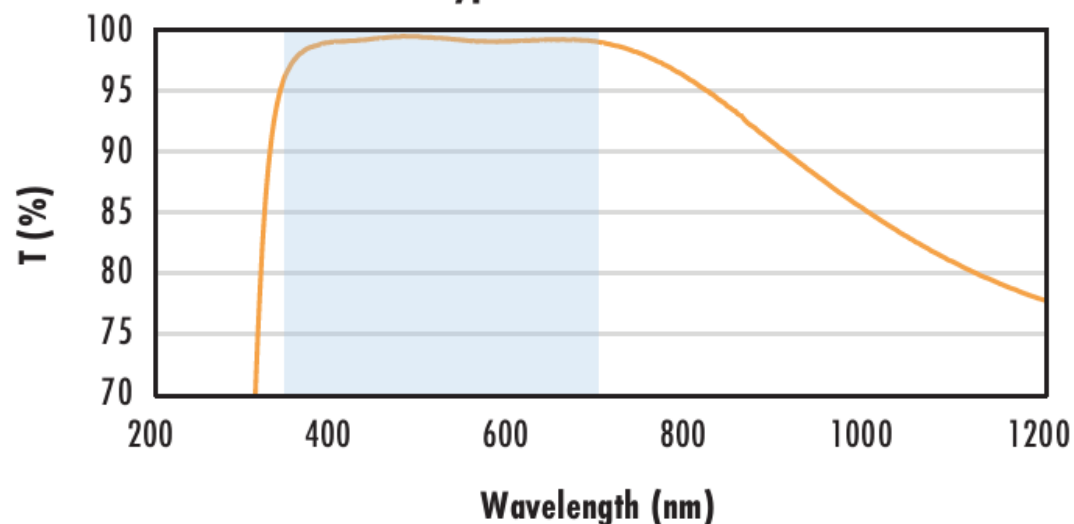
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

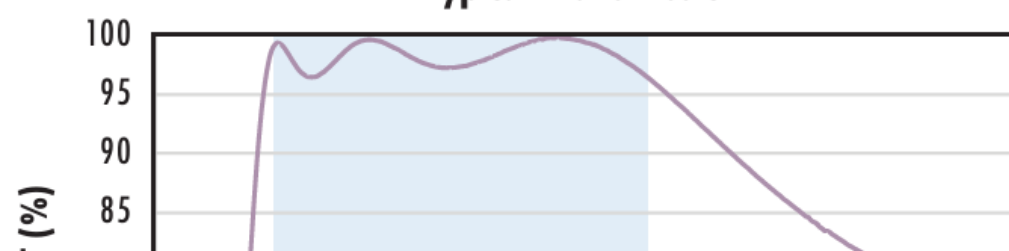
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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N-BK7 with VIS-NIR Coating Typical Transmission



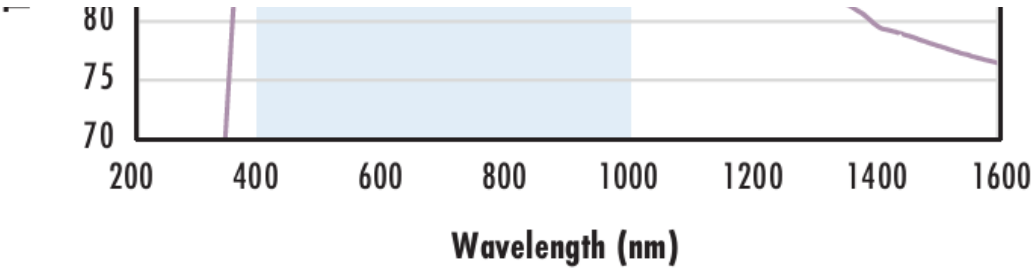
Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

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

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

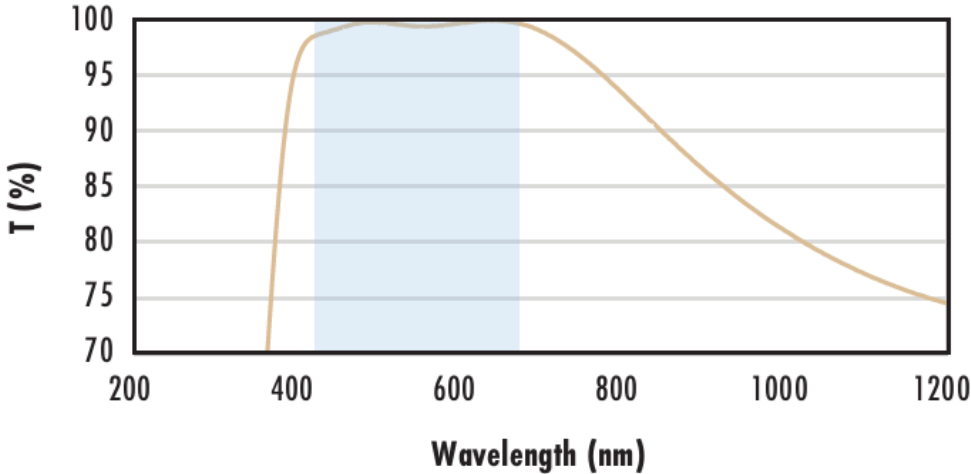
$$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$$



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.

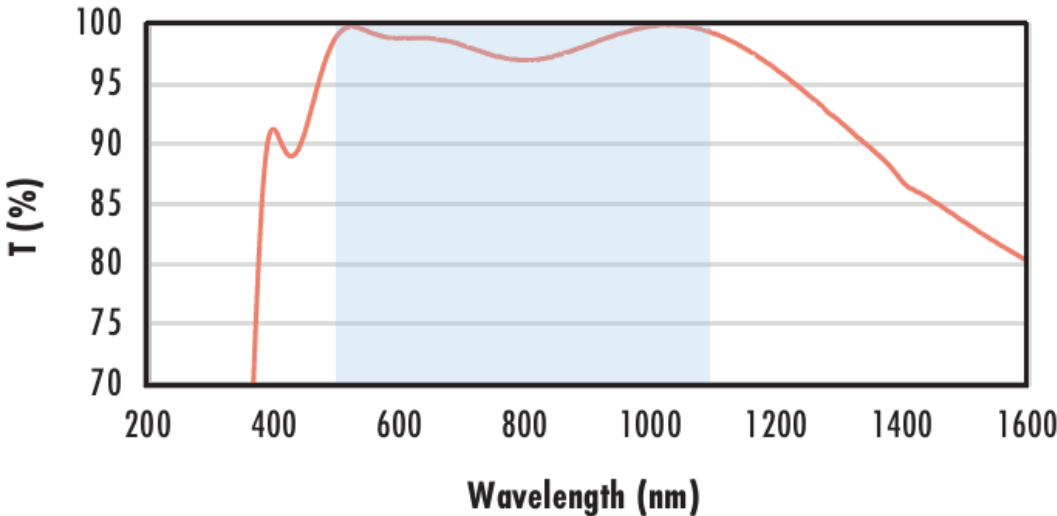
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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**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:

$$R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}$$

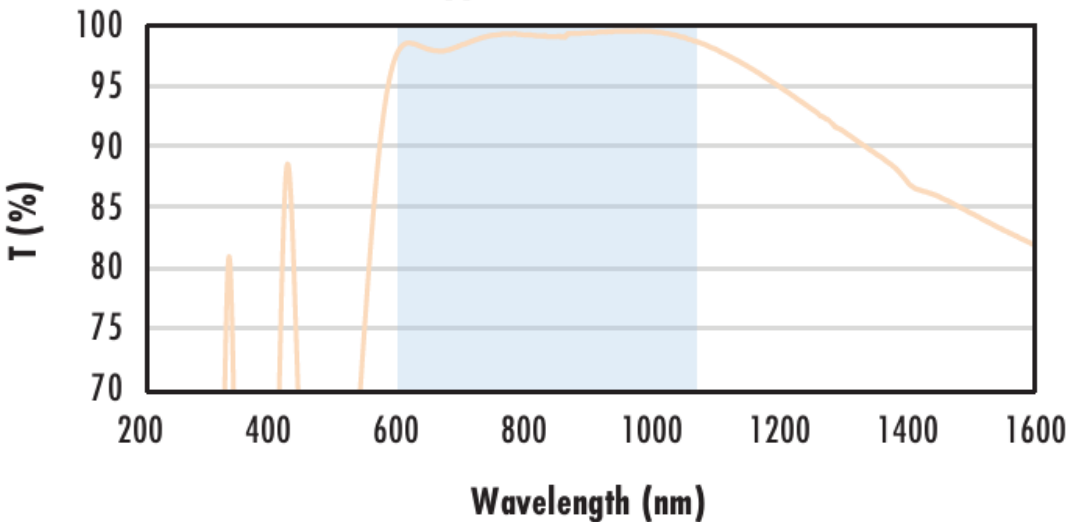
$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$

$$R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$$

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

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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.

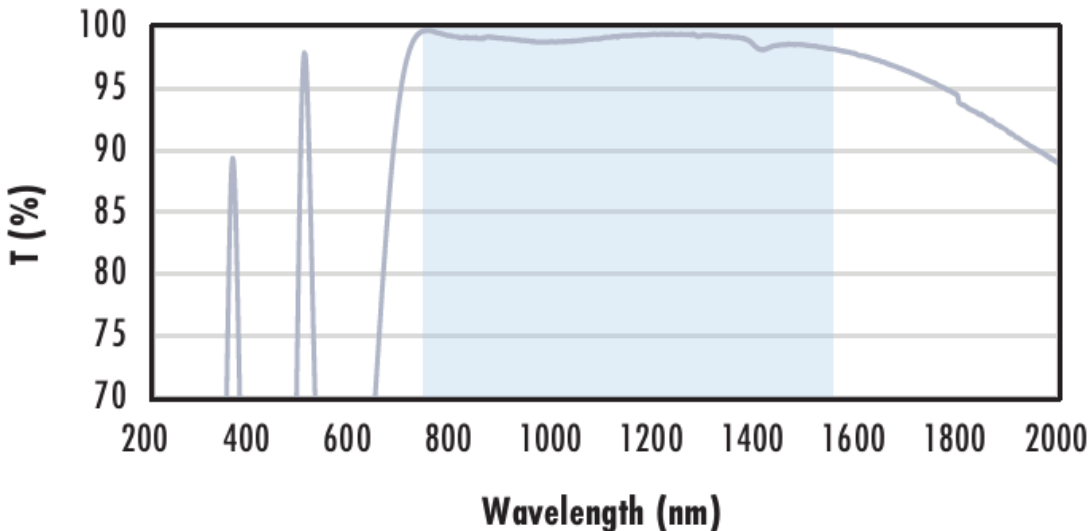
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

$$R_{abs} \leq 1.5\% \text{ @ } 750 - 800\text{nm}$$

$$R_{abs} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}$$

$$R_{avg} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}$$

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

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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

