

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



Stock **#45-100** 20+ In Stock

[Other Coating Options](#)

-

1

+

€42^{.75}

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Volume Pricing	
Qty 1-9	€42,75 each
Qty 10-24	€38,25 each
Qty 25-99	€34,25 each
Need More?	Request Quote

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 Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Double-Convex Lens	Type:
Physical & Mechanical Properties	

15.00 +0.0/-0.025	Diameter (mm):
<1	Centering (arcmin):
Protective as needed	Bevel:
4.50	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
1.93	Edge Thickness ET (mm):
14.00	Clear Aperture CA (mm):
Optical Properties	
13.68	Back Focal Length BFL (mm):
15.00	Effective Focal Length EFL (mm):
MgF ₂ (400-700nm)	Coating:
R _{avg} ≤1.75% @400 - 700nm	Coating Specification:
N-SF11	Substrate: □
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
22.51	Radius R ₁ =R ₂ (mm):
1.00	f#:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
0.50	Numerical Aperture NA:
400 - 700	Wavelength Range (nm):
10 J/cm ² @ 532nm, 10ns	Damage Threshold, By Design: □

Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 247:

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](#).

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



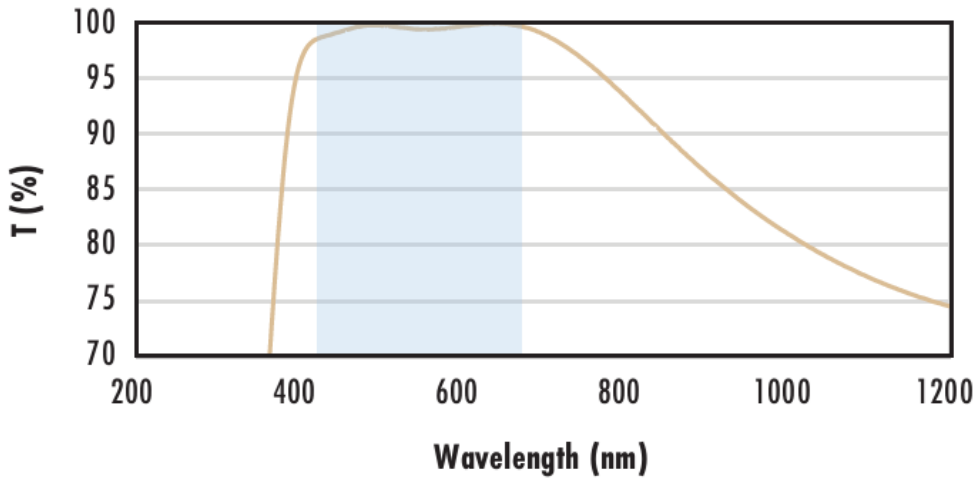
N-BK7																	
Uncoated N-BK7 Typical Transmission <table border="1"><caption>Uncoated N-BK7 Typical Transmission Data (Approximate)</caption><thead><tr><th>Wavelength (nm)</th><th>Transmittance T (%)</th></tr></thead><tbody><tr><td>350</td><td>70</td></tr><tr><td>400</td><td>92</td></tr><tr><td>600</td><td>92</td></tr><tr><td>1000</td><td>92</td></tr><tr><td>1500</td><td>92</td></tr><tr><td>2000</td><td>91</td></tr><tr><td>2200</td><td>89</td></tr></tbody></table>	Wavelength (nm)	Transmittance T (%)	350	70	400	92	600	92	1000	92	1500	92	2000	91	2200	89	Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data
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350	70																
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350	85																
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600	98																
800	98																
1000	98																
1200	85																



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.

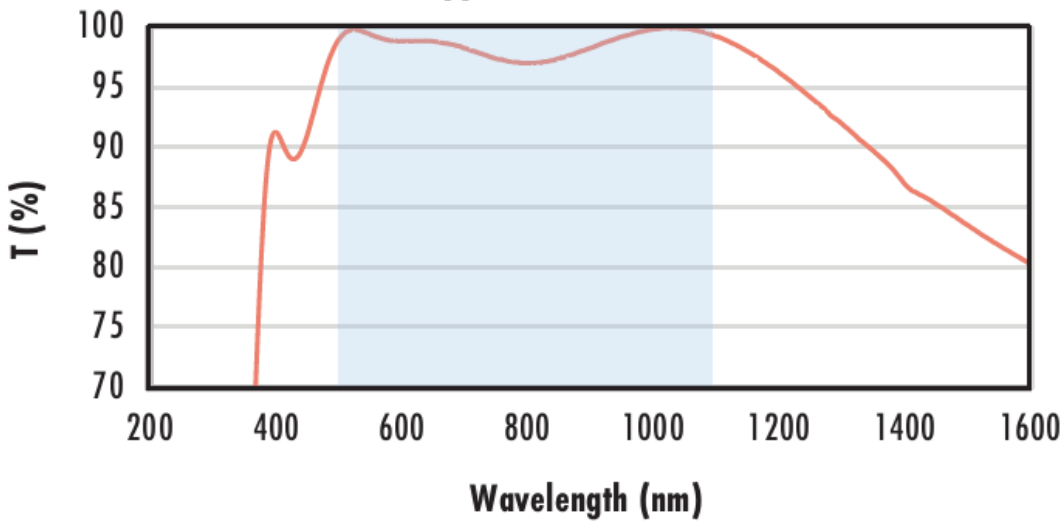
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

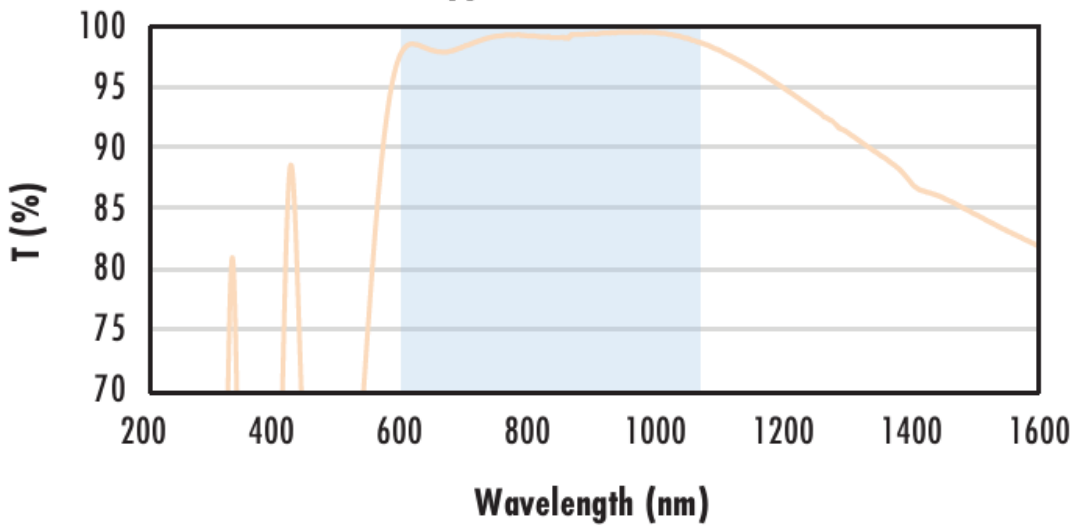
$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$

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

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

[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.

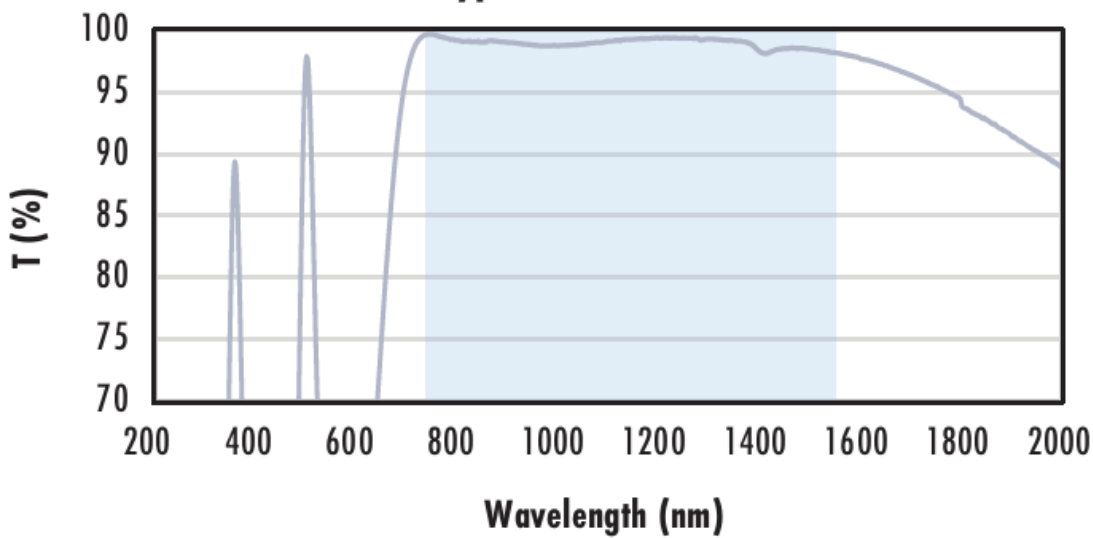
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

[Click Here to Download Data](#)

Coating Curves

Compatible Mounts

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