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TECHSPEC® 20.0mm Dia. x 80.0mm FL, VIS-EXT Coated Plano-Convex Lens



Stock #88-717 **8 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ €51.⁰⁰

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Volume Pricing	
Qty 1-9	€51,00 each
Qty 10-24	€45,75 each
Qty 25-49	€40,75 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Plano-Convex Lens **Type:**

Physical & Mechanical Properties

Diameter (mm):
20.00 +0.0/-0.025

Centering (arcmin):
<1

Center Thickness CT (mm):
2.35 ±0.10

Edge Thickness ET (mm):
1.13

Clear Aperture CA (mm):
19

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
80.00 @ 587.6nm

Back Focal Length BFL (mm):
78.45

Coating:
VIS-EXT (350-700nm)

Coating Specification:
R_{avg} <0.5% @ 350 - 700nm

Substrate:
N-BK7

Surface Quality:
40-20

Power (P-V) @ 632.8nm:
1.5λ

Irregularity (P-V) @ 632.8nm:
λ/4

Focal Length Tolerance (%):
±1

Radius R₁ (mm):
41.48

f#:
4

Numerical Aperture NA:
0.13

Wavelength Range (nm):
350 - 700

Damage Threshold, By Design:
5 J/cm² @ 532nm, 10ns

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

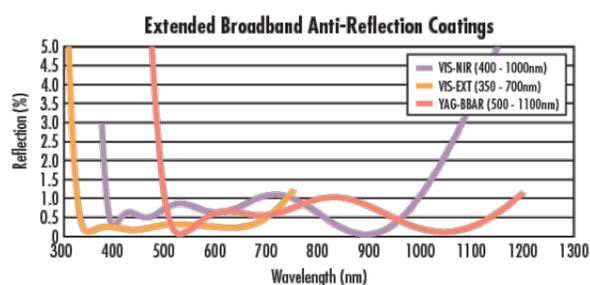
Reach 235:
Compliant

Product Details

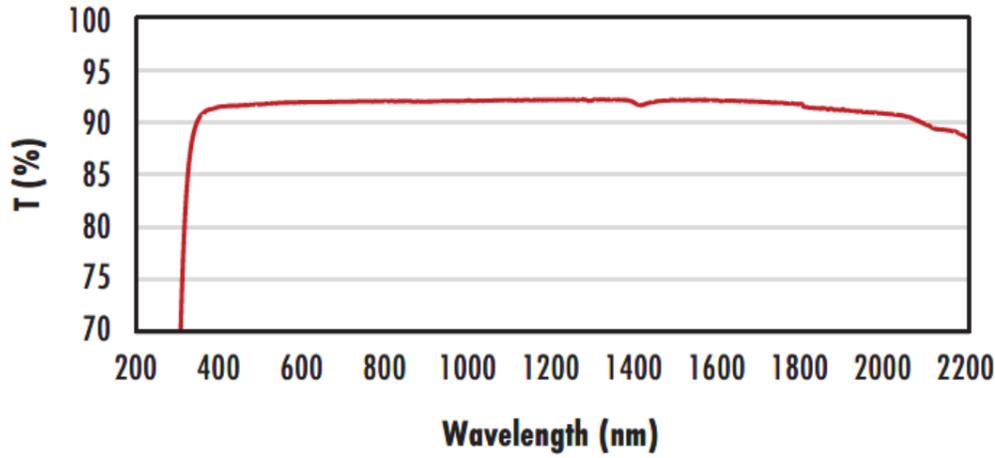
- Visible Broadband Anti-Reflection Coating with Extended UV Performance
- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: **Uncoated**, **MgF₂**, **VIS 0°**, **VIS-NIR**, **NIR I**, **NIR II**, and **YAG-BBAR**

TECHSPEC® VIS-EXT Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® VIS-EXT Coated Plano-Convex (PCX) Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered **uncoated** or with broadband anti-reflective (BBAR) coatings, which include **MgF₂**, **VIS 0°**, **VIS-NIR**, **NIR I**, **NIR II**, and **YAG-BBAR**.

Technical Information



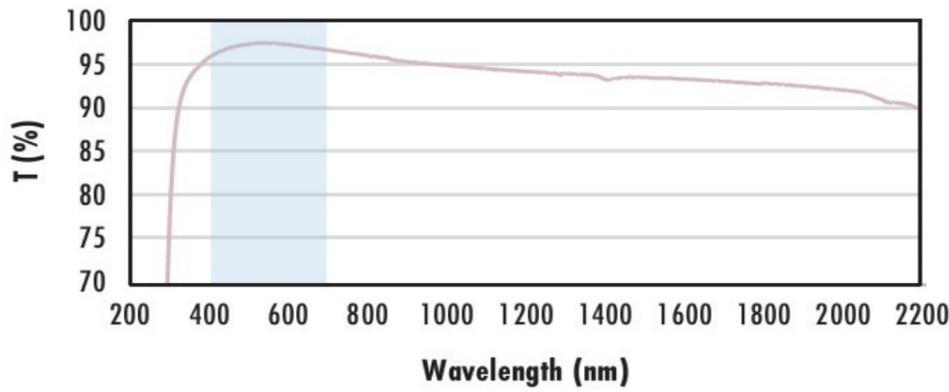
Uncoated N-BK7 Typical Transmission



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

[Click Here to Download Data](#)

N-BK7 with MgF₂ Coating Typical Transmission



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

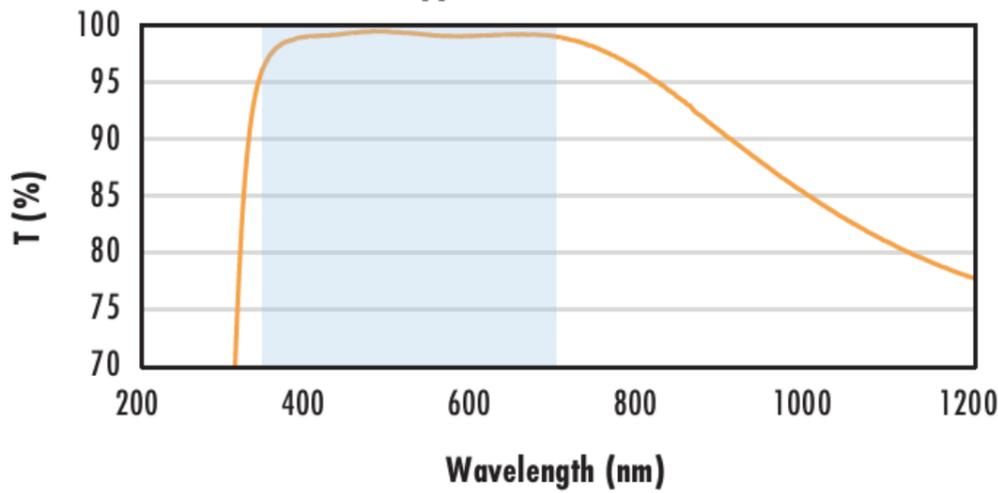
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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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.

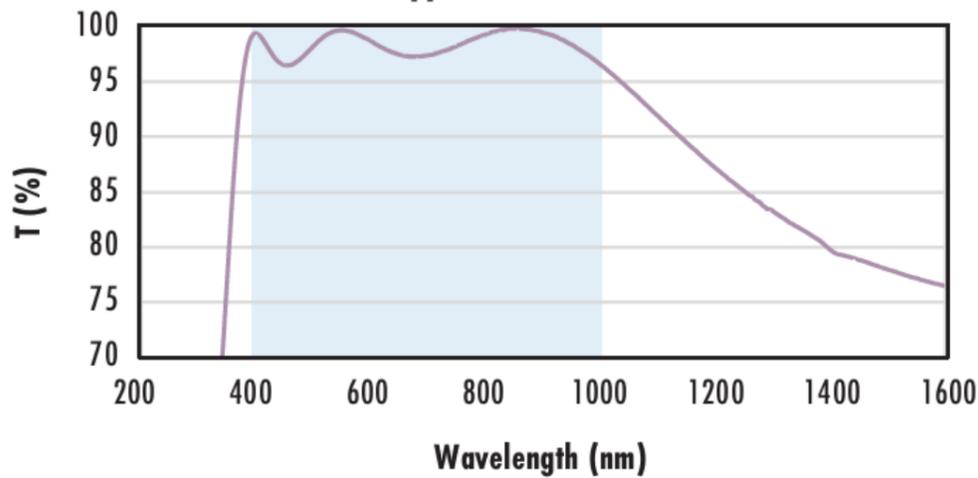
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

$R_{abs} \leq 0.25\% @ 880\text{nm}$
 $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$
 $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$

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

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N-BK7 with VIS 0° Coating Typical Transmission

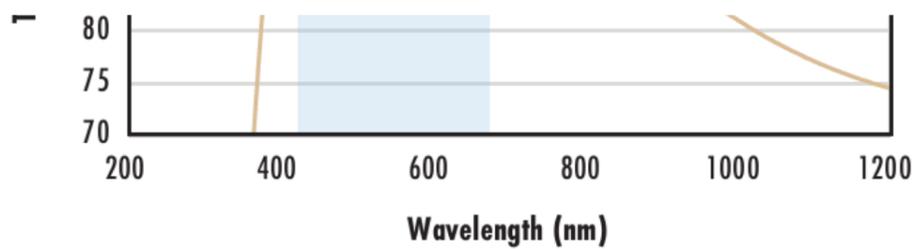


Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

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

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

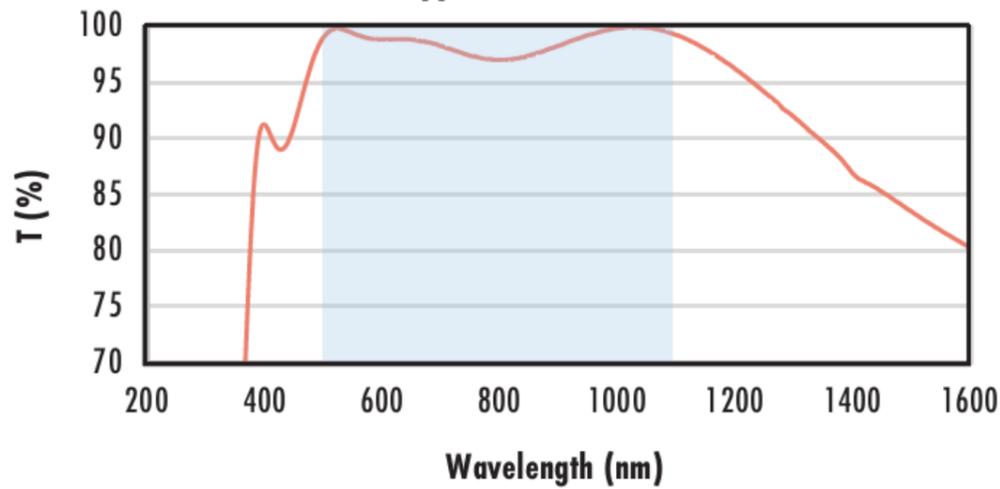
Data outside this range is not guaranteed and is for reference only.



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.

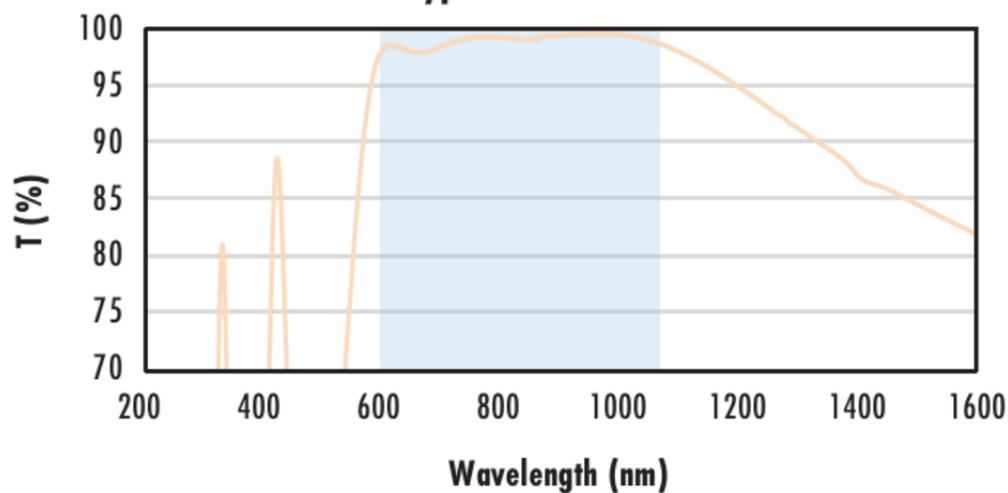
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

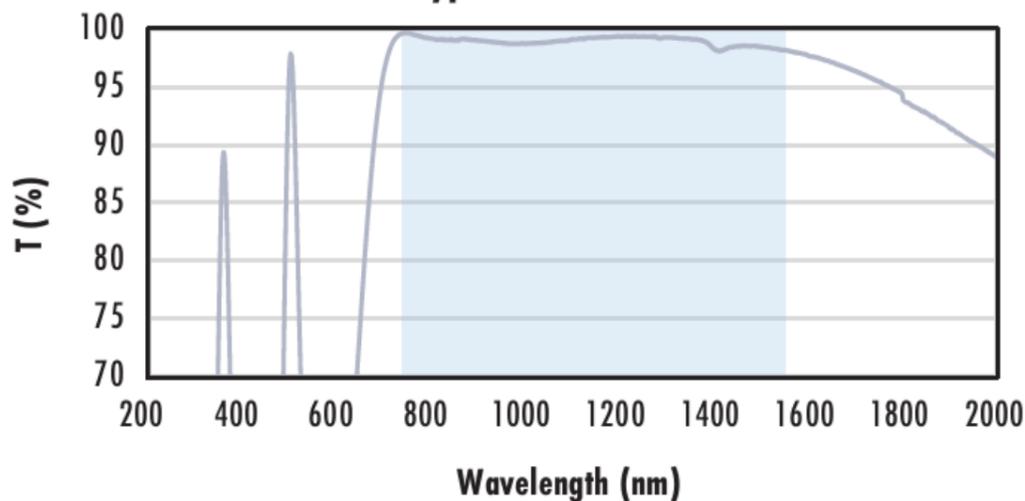
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

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

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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

