

TECHSPEC® 20.0mm Dia. x 60.0mm FL, VIS 0° Coated, Plano-Convex Lens



Stock #47-888 3-5 DAYS

[Other Coating Options](#)

⊖ 1 ⊕ **\$\$62³⁵**

ADD TO CART

Qty 1-9

\$\$62.35

Qty 10+

\$\$55.82

Volume Pricing

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SPECIFICATIONS

General

Type:
Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):
20.00 +0.0/-0.025

Centering (arcmin):
<1

Center Thickness CT (mm):
4.50 ±0.10

Edge Thickness ET (mm):
2.84

Clear Aperture CA (mm):
19

Bevel:
Protective bevel as needed

Optical Properties

Effective Focal Length EFL (mm):
60.00 @ 587.6nm

Back Focal Length BFL (mm):
57.03

Coating:
VIS 0° (425-675nm)

Coating Specification:
R_{avg} ≤ 0.4% @ 425 - 675nm

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):
31.01

f/#:
3

Numerical Aperture NA:
0.17

Wavelength Range (nm):
425 - 675

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

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Reach 219:
[Compliant](#)

Certificate of Conformance:
[View](#)

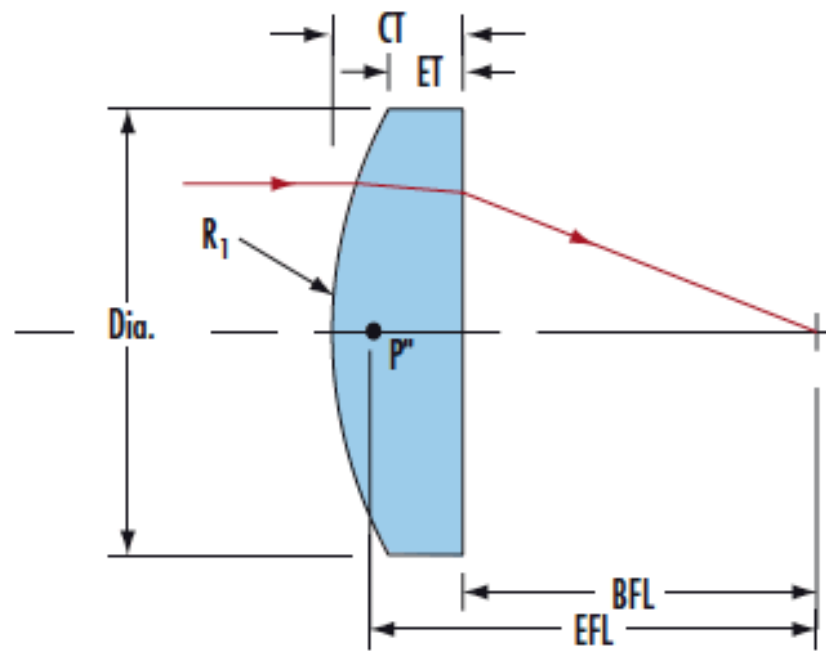
PRODUCT DETAILS

- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF₂](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)

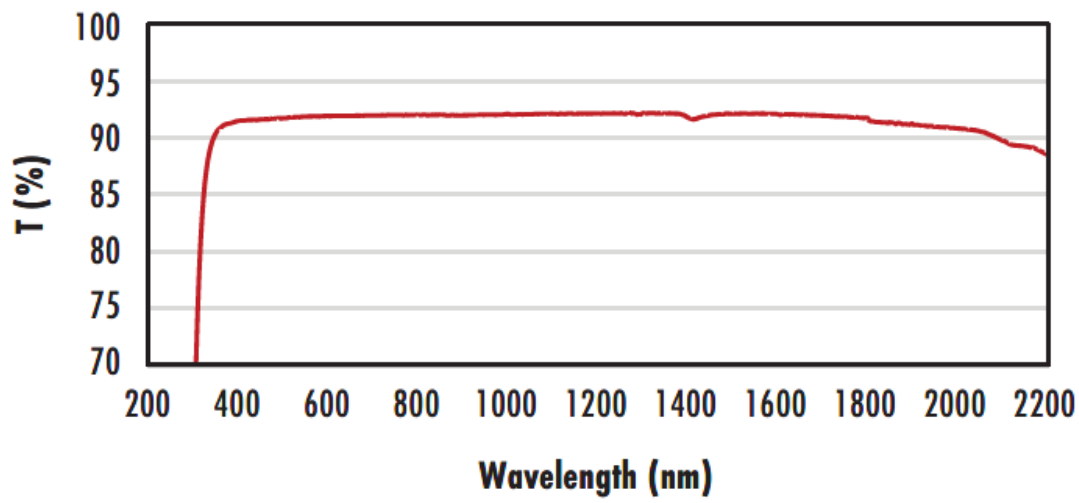
TECHSPEC® VIS 0° Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. Plano-Convex lenses are ideal for a multitude of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms. TECHSPEC® VIS 0° 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-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#).

These coated lenses can be utilized in a host of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

TECHNICAL INFORMATION



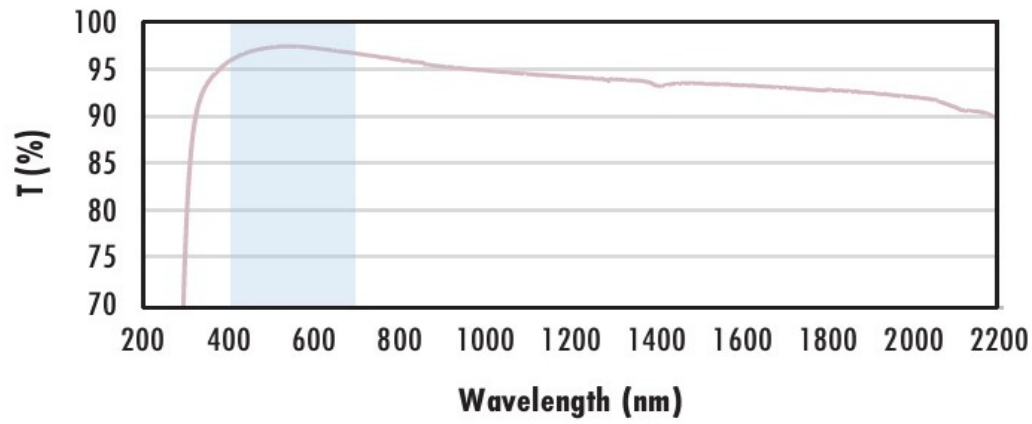
Uncoated N-BK7 Typical Transmission



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.

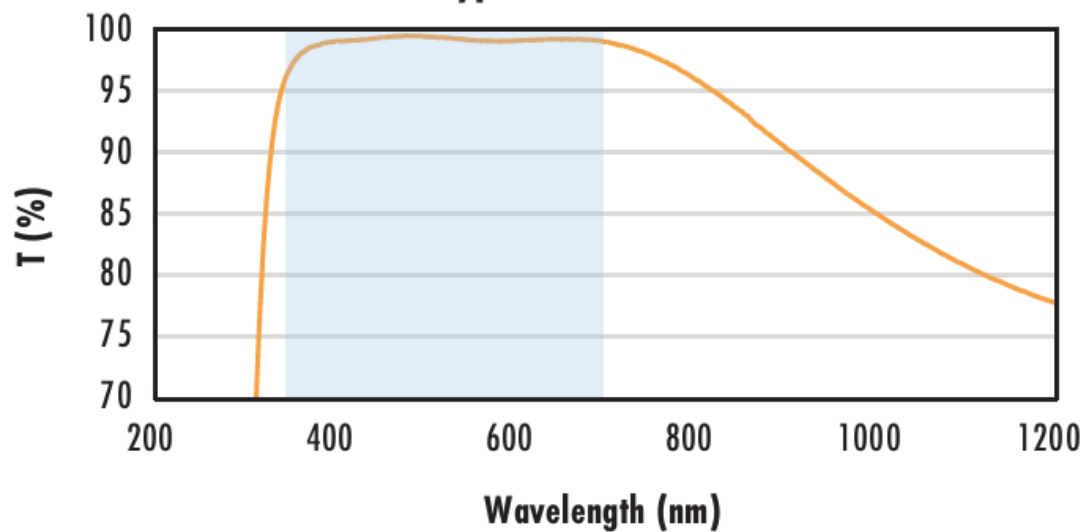
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[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.

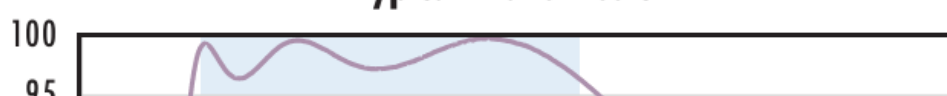
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

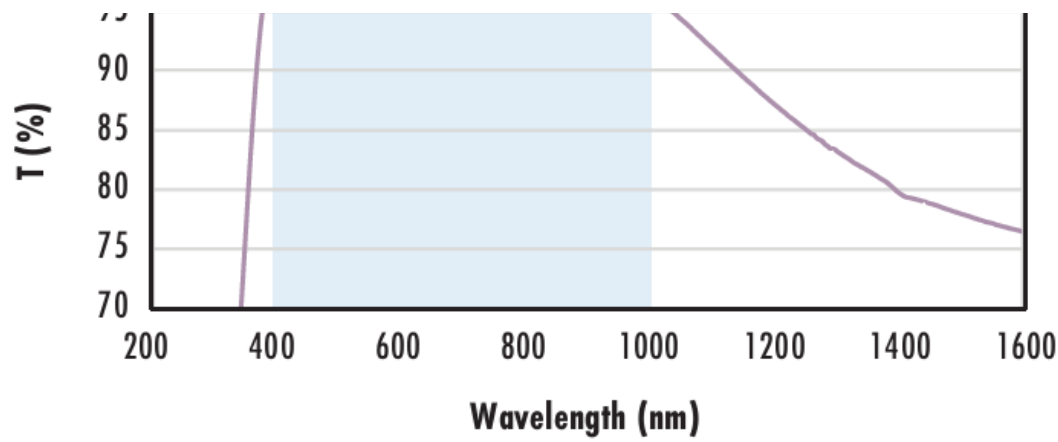
Data outside this range is not guaranteed and is for reference only.

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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:

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

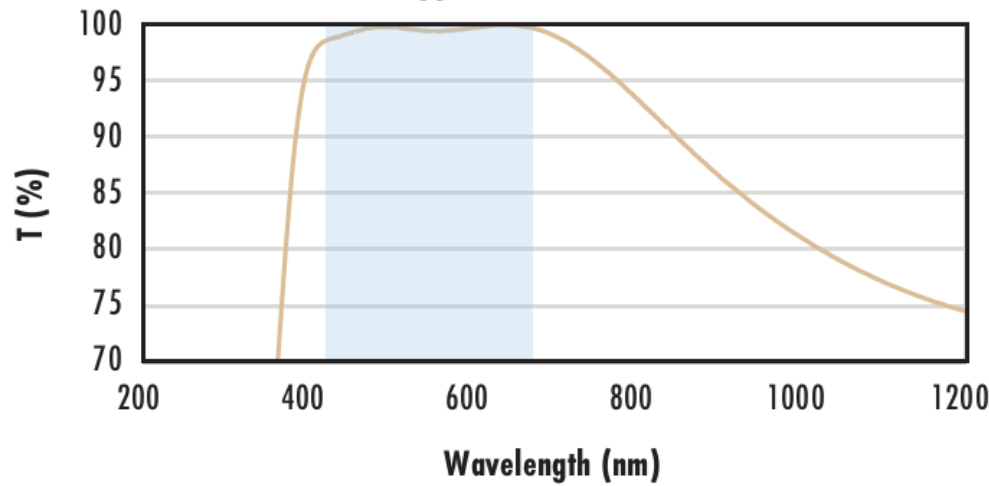
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

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

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.

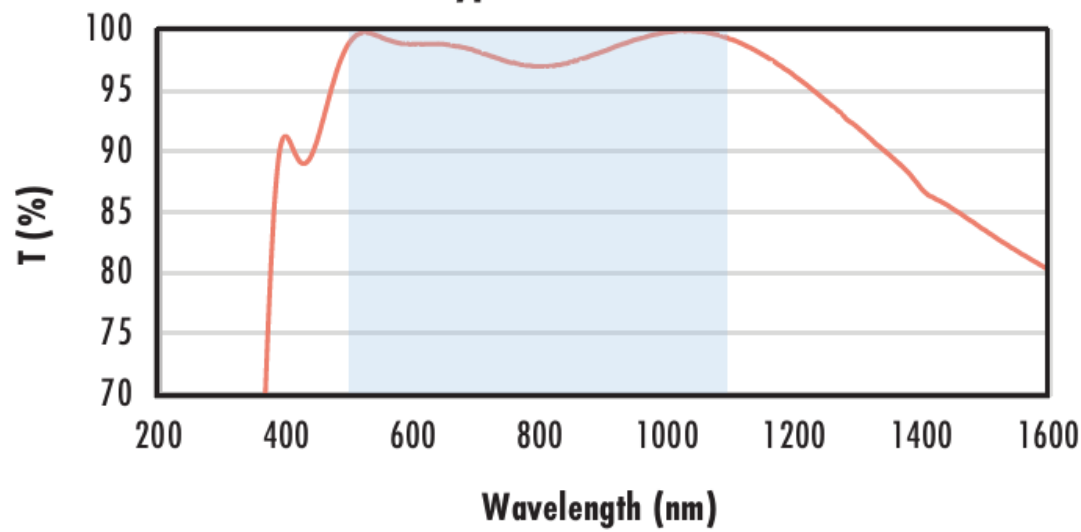
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[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:

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

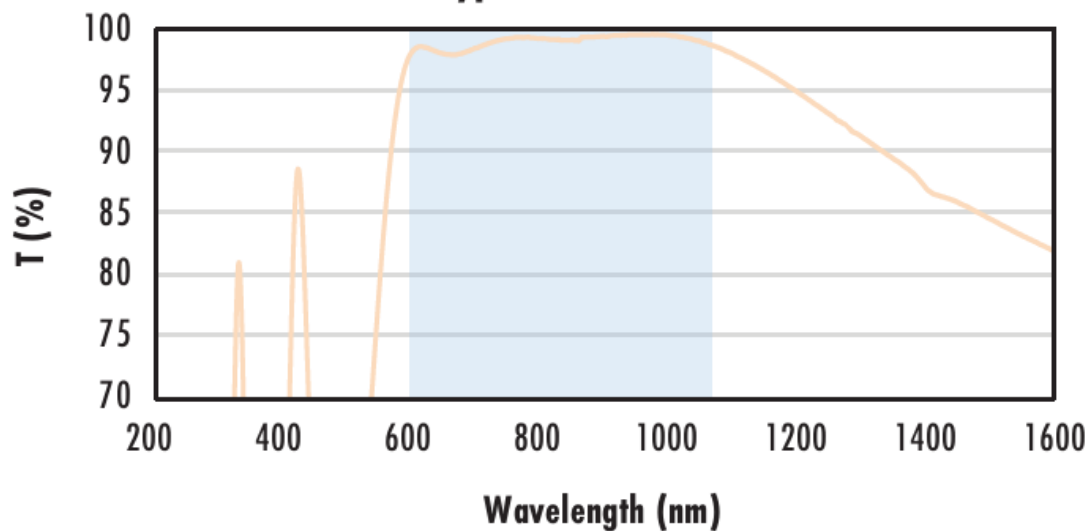
$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

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

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

[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.

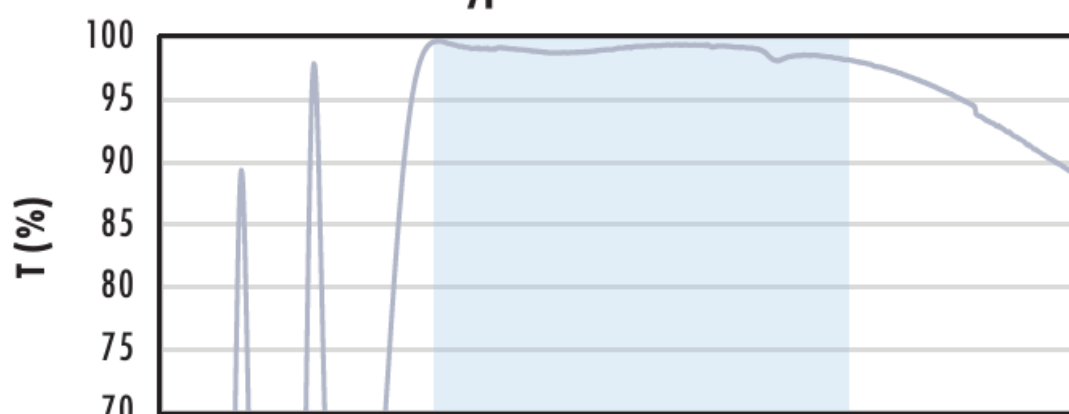
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

[Click Here to Download Data](#)

200 400 600 800 1000 1200 1400 1600 1800 2000
Wavelength (nm)

COATING CURVES

COMPATIBLE MOUNTS
