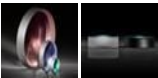


TECHSPEC[®] 20mm Diameter x -40 FL, VIS-NIR Coated, Plano-Concave Lens



TECHSPEC VIS-NIR Coated Plano-Concave (PCV) Lenses



Stock **#45-920 7 In Stock**
[Other Coating Options](#)

-

1

+

₹3,776

ADD TO CART

Volume Pricing	
Qty 1-9	₹3,776 each
Qty 10-25	₹3,386 each
Qty 26-49	₹3,017 each
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Product Downloads

General

Type:
Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):

20.00 +0.0/-0.025	
Protective as needed	Bevel:
3.50	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
<1	Centering (arcmin):
19.00	Clear Aperture CA (mm):
5.92	Edge Thickness ET (mm):

Optical Properties	
-40.00	Effective Focal Length EFL (mm):
N-BK7	Substrate: ☐
2.00	f#:
0.25	Numerical Aperture NA:
VIS-NIR (400-1000nm)	Coating:
400 - 1000	Wavelength Range (nm):
-42.31	Back Focal Length BFL (mm):
R _{abs} ≤0.25% @ 880nm R _{avg} ≤1.25% @ 400 - 870nm R _{avg} ≤1.25% @ 890 - 1000nm	Coating Specification:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
-20.67	Radius R ₁ (mm):
40-20	Surface Quality:
5 J/cm² @ 532nm, 10ns	Damage Threshold, By Design: ☐
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:

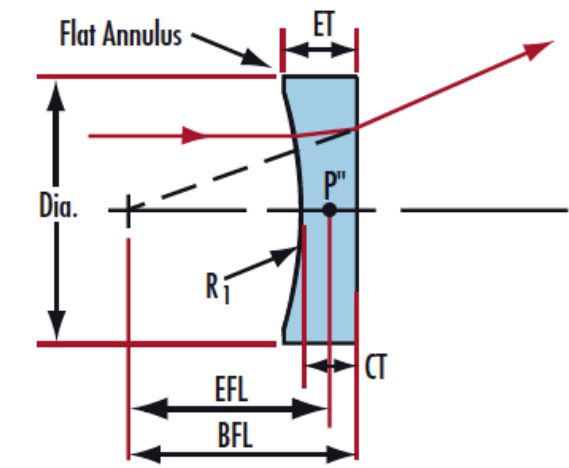
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:
Japan	Country of Origin:
Edmund Optics India Private Limited	Imported By:

Product Details

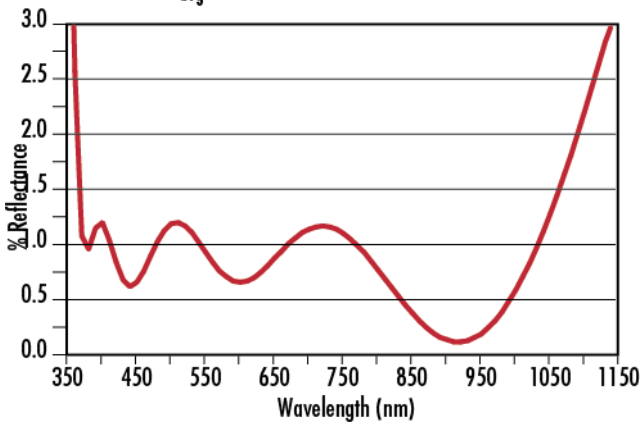
- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- <0.25% Reflectance @ 880nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are optimized for transmission (>99%) in the near-infrared. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), or with [NIR II](#) AR coating options.

Technical Information

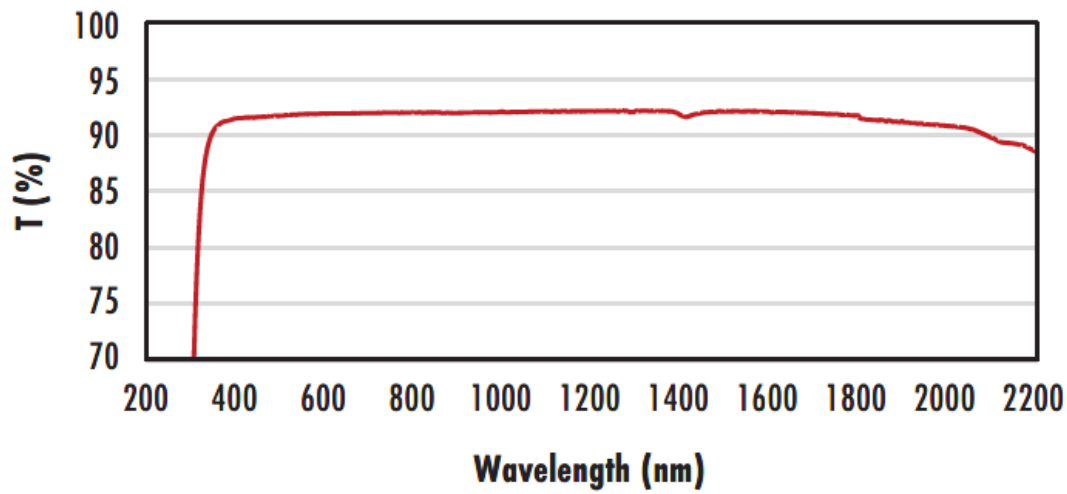


VIS-NIR Coating
 $R_{\text{obs}} \leq 0.25\% @ 880\text{nm}$
 $R_{\text{avg}} \leq 1.25\% @ 400-1000\text{nm}$



N-BK7

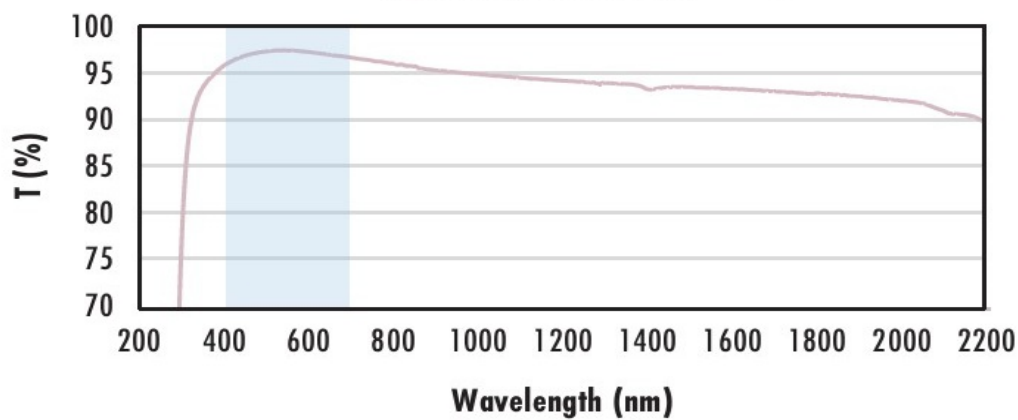
Uncoated N-BK7 Typical Transmission



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

[Click Here to Download Data](#)

N-BK7 with MgF_2 Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF_2 (400-700nm) coating at 0° AOI.

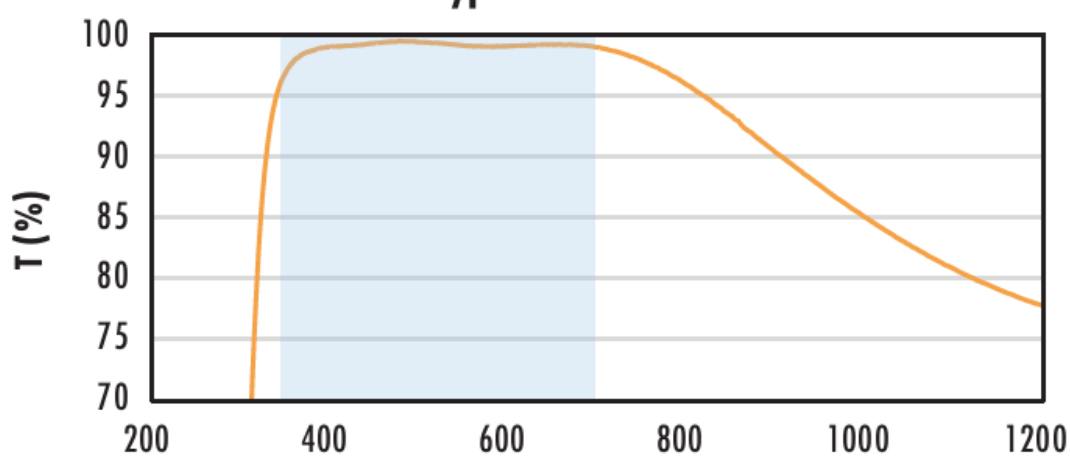
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

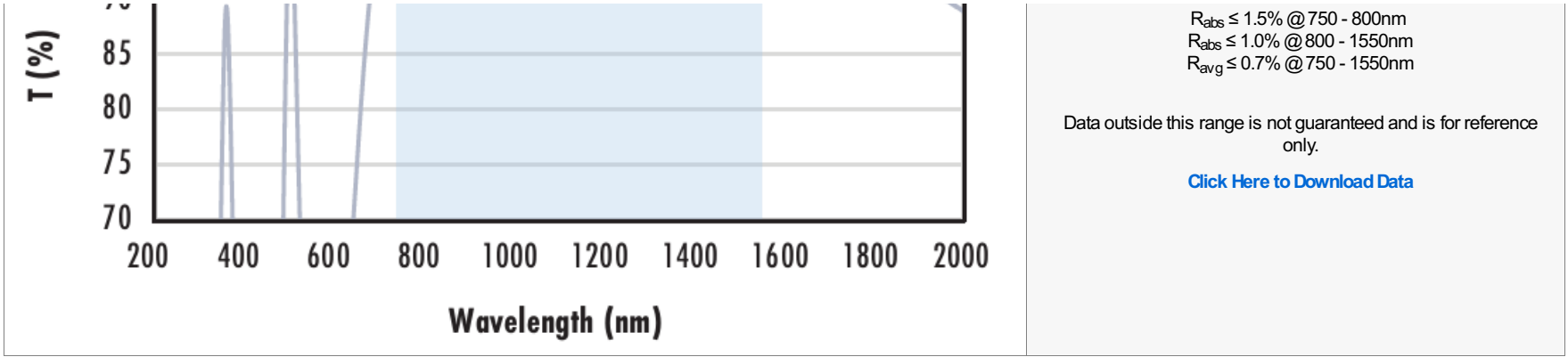
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

Wavelength (nm) N-BK7 with VIS-NIR Coating Typical Transmission T (%) Wavelength (nm)	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: $R_{abs} \leq 0.25\% @ 880nm$ $R_{avg} \leq 1.25\% @ 400 - 870nm$ $R_{avg} \leq 1.25\% @ 890 - 1000nm$ 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 T (%) Wavelength (nm)	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: $R_{avg} \leq 0.4\% @ 425 - 675nm$ 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 T (%) Wavelength (nm)	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. Click Here to Download Data
N-BK7 with NIR I Coating Typical Transmission T (%) Wavelength (nm)	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. Click Here to Download Data
N-BK7 with NIR II Coating Typical Transmission T (%) Wavelength (nm)	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:



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