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TECHSPEC[®] 9.0mm Dia. x -27 FL, YAG-BBAR, Plano-Concave Lens



Stock **#21-309** 20+ In Stock

-

1

+

C\$68²⁵

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Volume Pricing	
Qty 1-9	C\$68.25 each
Qty 10-25	C\$61.25 each
Qty 26-49	C\$54.60 each
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General

Type:

Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):

9.00

Protective as needed	Bevel:
3.00 ±0.05	Center Thickness CT (mm):
<1	Centering (arcmin):
8.1	Clear Aperture CA (mm):
3.42	Edge Thickness ET (mm):
Optical Properties	
-27.00	Effective Focal Length EFL (mm):
N-SF11	Substrate: □
1.00	f/#:
0.17	Numerical Aperture NA:
YAG-BBAR (500-1100nm)	Coating:
500 - 1100	Wavelength Range (nm):
-28.68	Back Focal Length BFL (mm):
R _{abs} <0.25% @ 532nm R _{abs} <0.25% @ 1064nm R _{avg} <1.0% @ 500 - 1100nm	Coating Specification:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
-21.19	Radius R ₁ (mm):
40-20	Surface Quality:
5 J/cm² @ 532nm, 10ns	Damage Threshold, By Design: □
1.5λ	Power (P-V) @ 632.8nm:
M4	Irregularity (P-V) @ 632.8nm:

Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

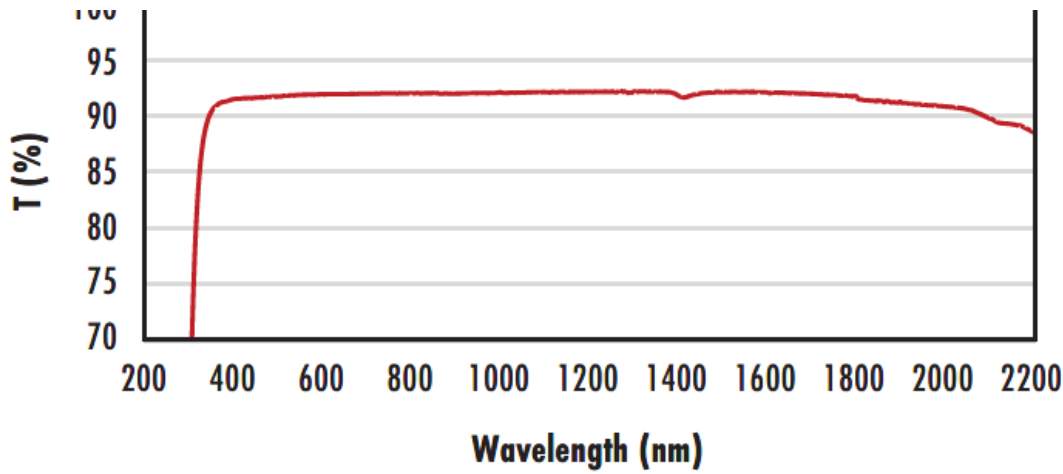
Product Details

- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Optimized for R<0.25% at both 532nm and 1064nm
- AR Coated to Provide <1.0% Reflectance per Surface for 500 - 1100nm
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [1064nm V-Coat](#)

TECHSPEC® YAG-BBAR 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® YAG-BBAR Coated Plano-Concave (PCV) Lenses feature less than 0.25% reflection at common Nd:YAG laser wavelengths of 532nm and 1064nm. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), or with [NIR II](#) AR coating options.

Technical Information

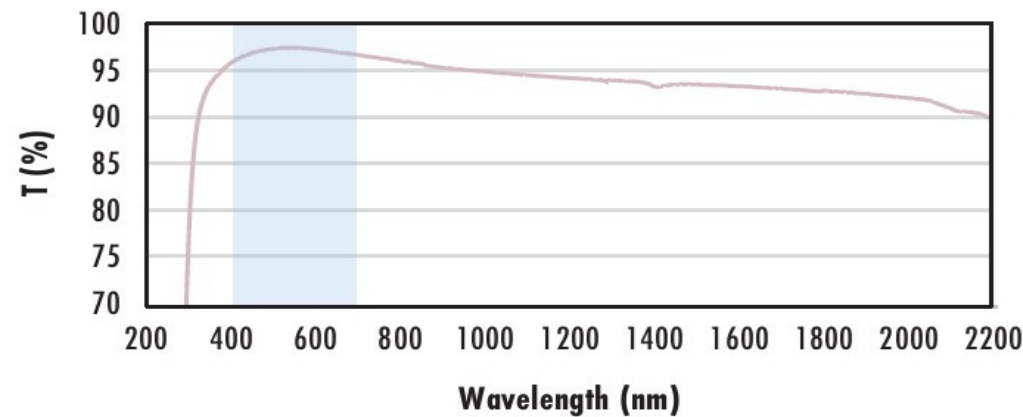




Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

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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.

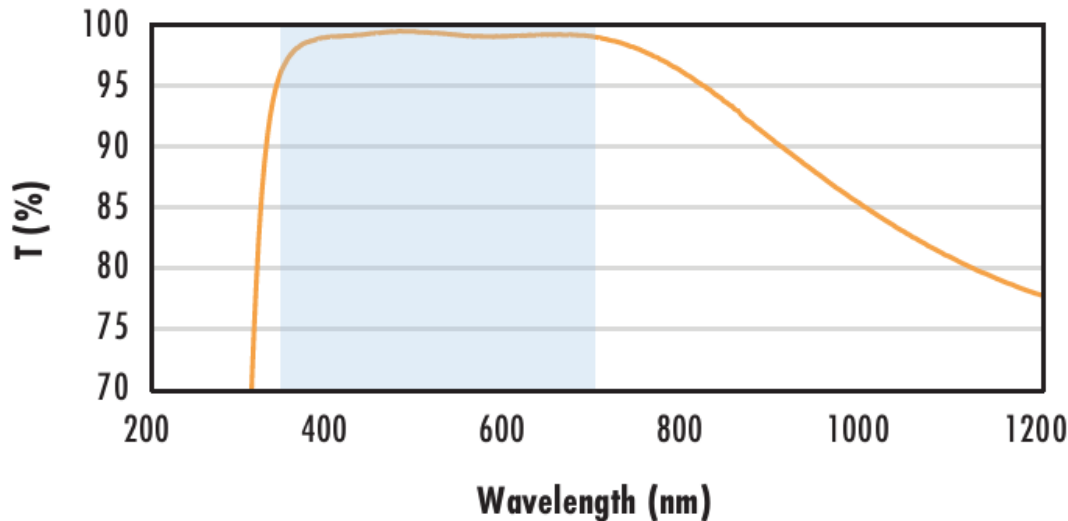
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

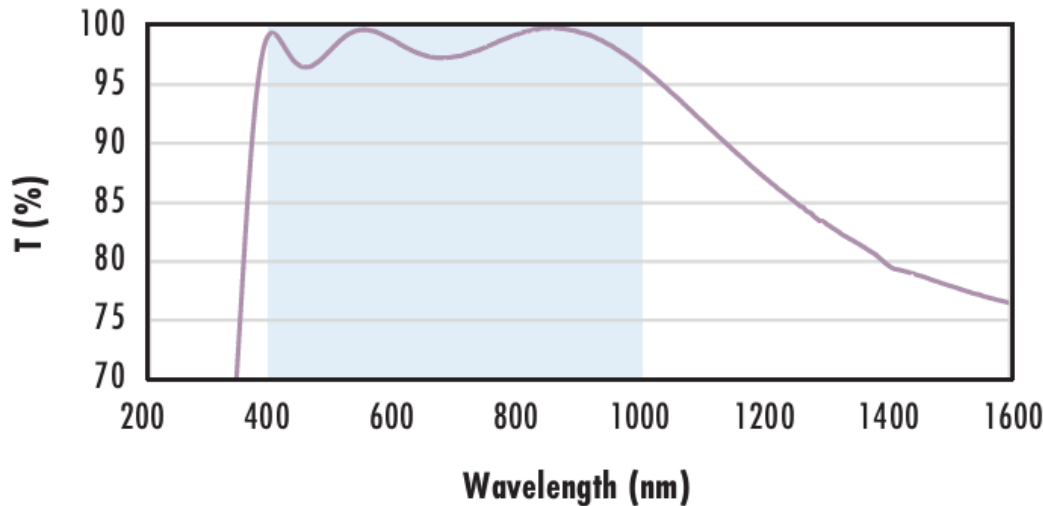
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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.

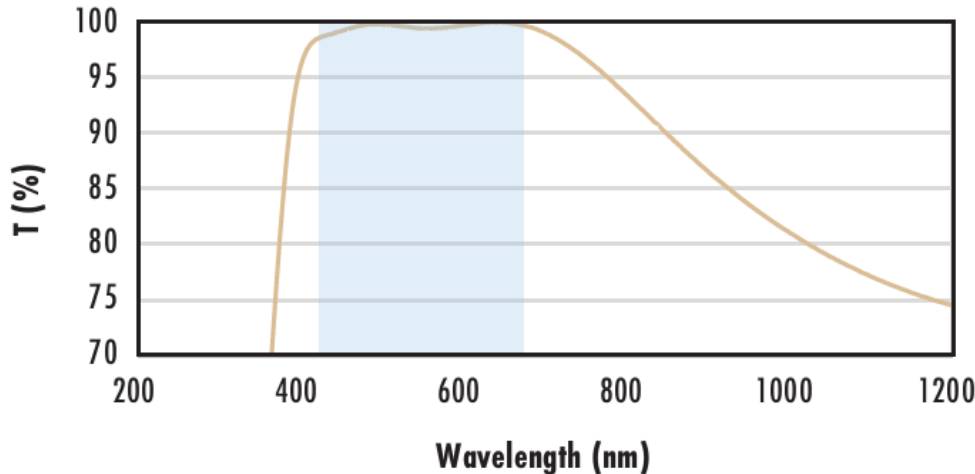
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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**N-BK7 with VIS 0° Coating
Typical Transmission**



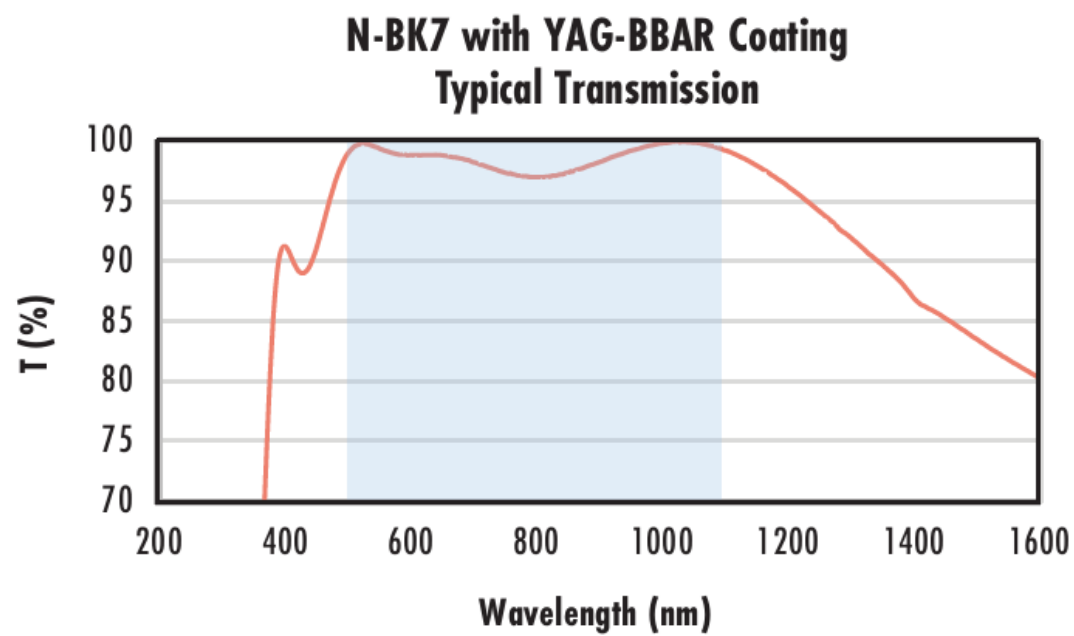
Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

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.

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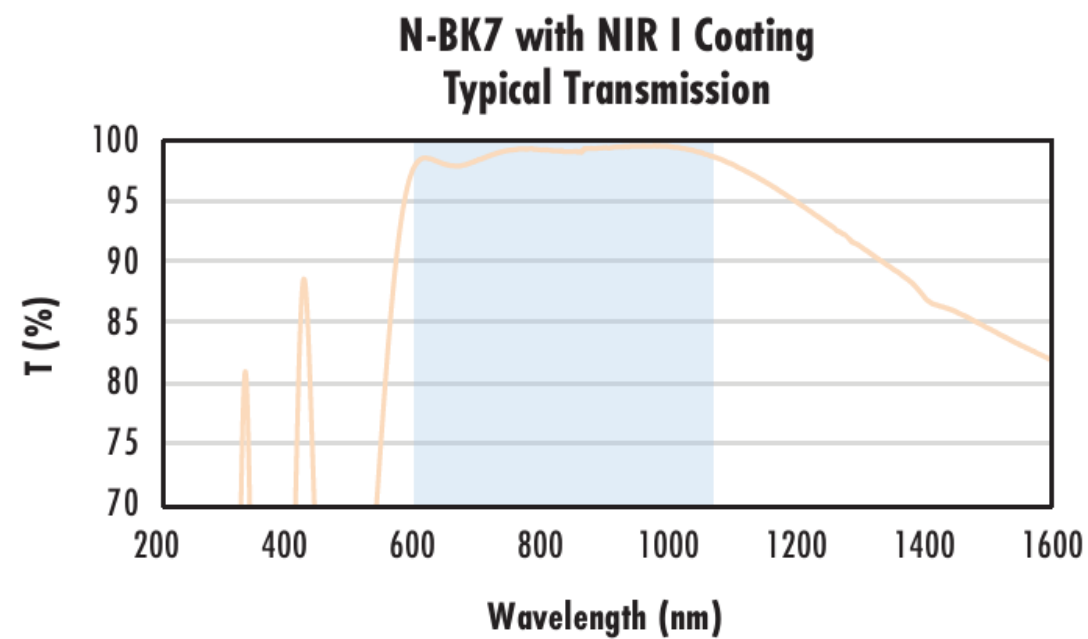


Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

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.

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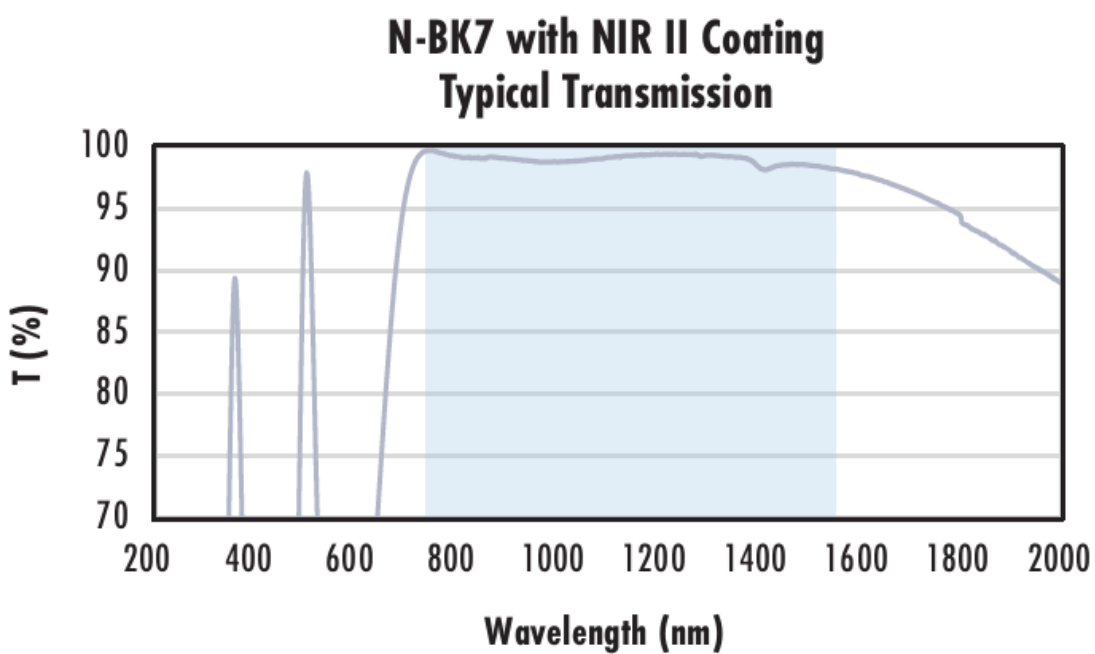
Typical transmission of a 3mm thick N-BK7 window with NIR I
(600 - 1050nm) coating at 0° AOI.

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.

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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:

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

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:

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- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

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