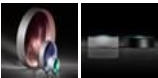


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TECHSPEC[®] 6mm Diameter x -6 FL, VIS-NIR Coated, Plano-Concave Lens



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



Stock **#45-910** 20+ In Stock

[Other Coating Options](#)

-

1

+

€47⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-9	€47,50 each
Qty 10-25	€42,50 each
Qty 26-49	€38,00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Plano-Concave Lens

Type:

Physical & Mechanical Properties

6.00 +0.0/-0.025	Diameter (mm):
Protective as needed	Bevel:
1.50	Center Thickness CT (mm):
±0.05	Center Thickness Tolerance (mm):
<3	Centering (arcmin):
5.4	Clear Aperture CA (mm):
2.22	Edge Thickness ET (mm):
Optical Properties	
-6.00	Effective Focal Length EFL (mm):
N-SF11	Substrate: □
1.00	f/#:
0.50	Numerical Aperture NA:
VIS-NIR (400-1000nm)	Coating:
400 - 1000	Wavelength Range (nm):
-6.84	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 (%):
-4.71	Radius R ₁ (mm):
40-20	Surface Quality:
5 J/cm ² @ 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:
Compliant	Reach 219:
View	Certificate of Conformance:

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](#).

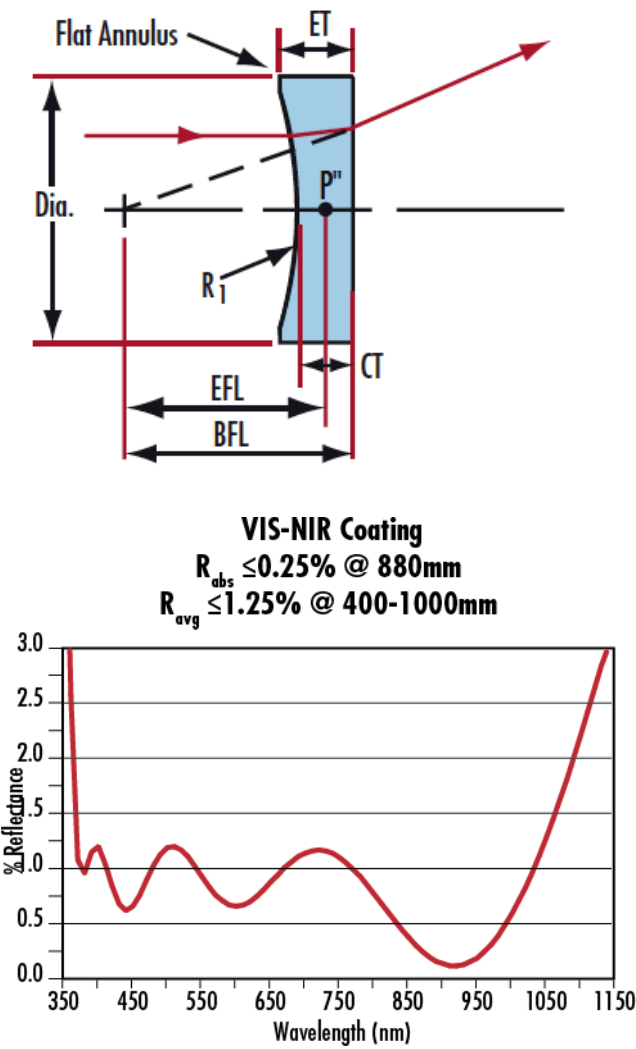
Product Details

- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- <0.25% Reflectance @ 880nm
- Designed for 0° Angle of Incidence

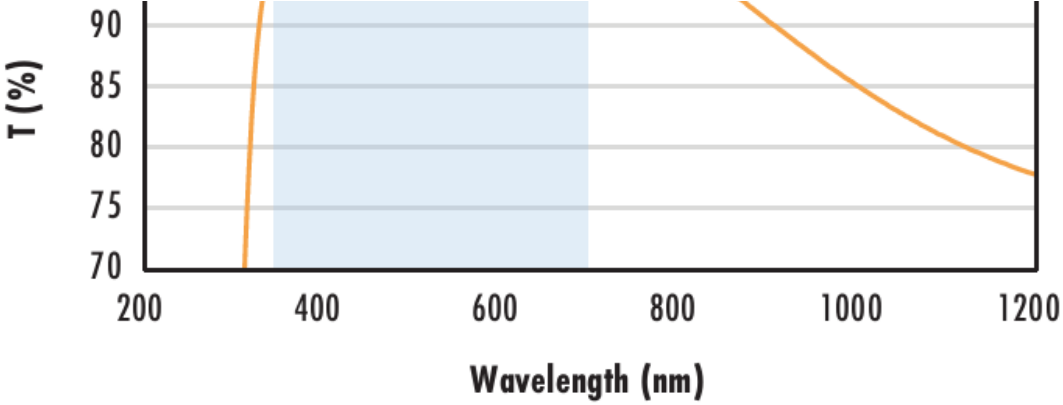
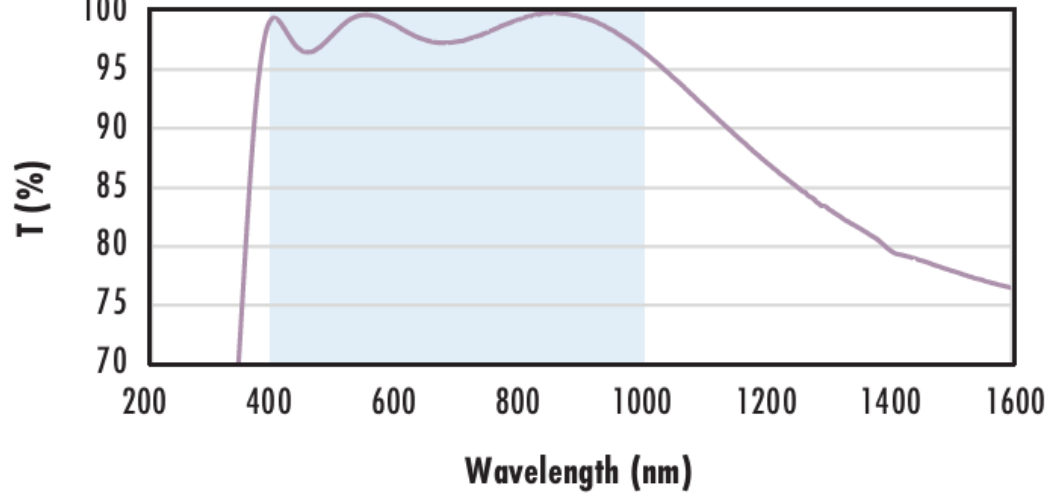
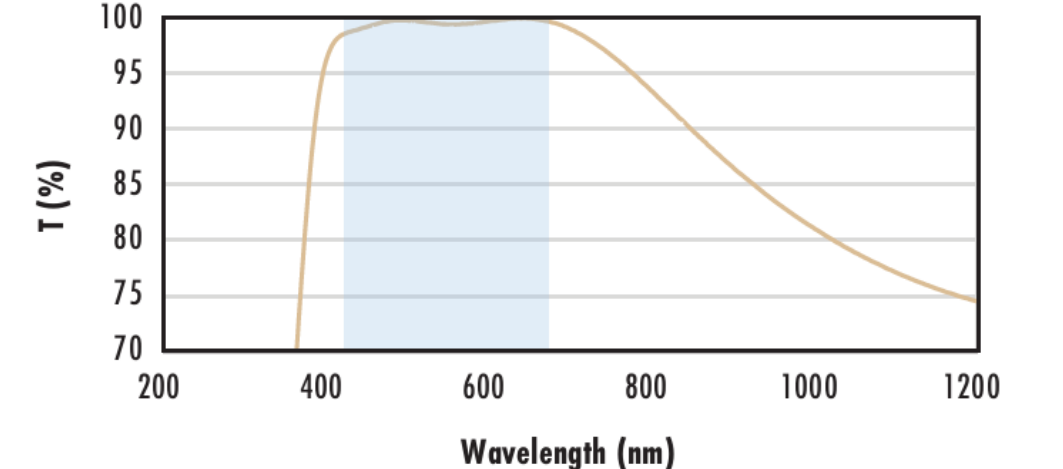
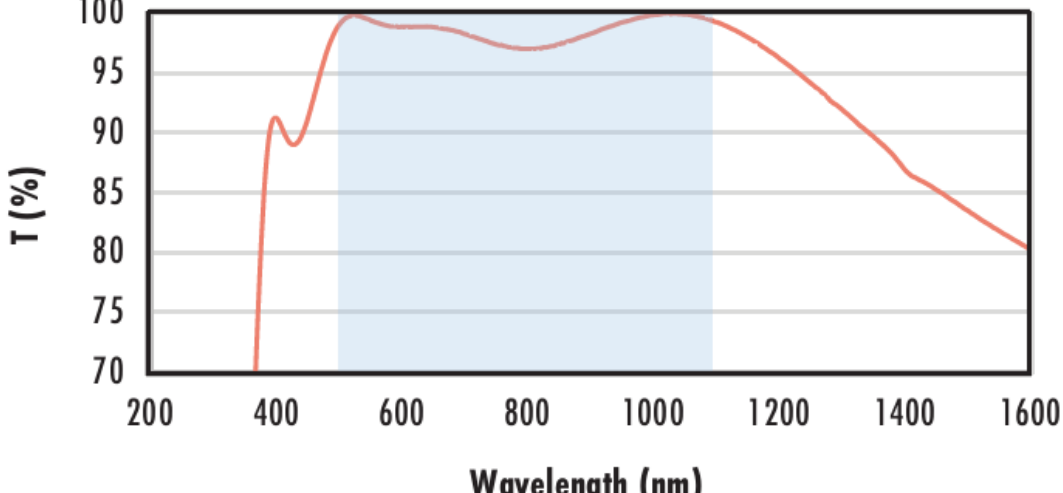
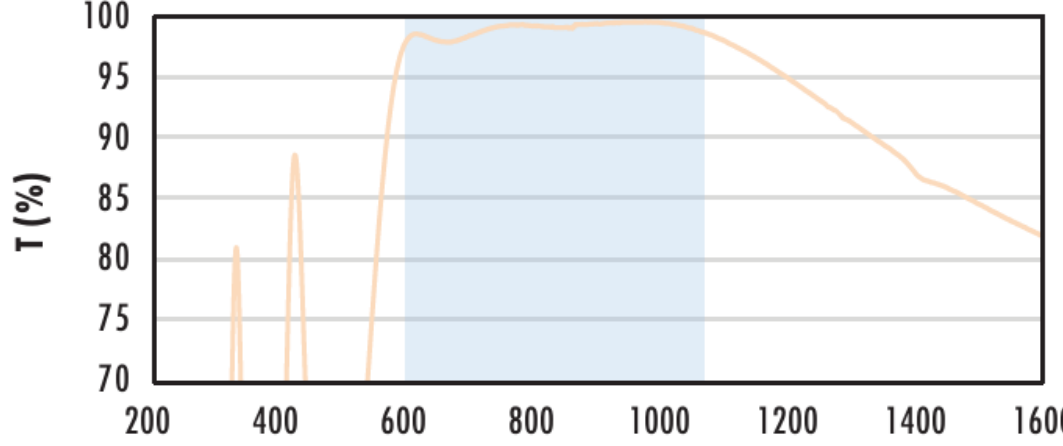
• Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

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



N-BK7																									
Uncoated N-BK7 Typical Transmission <table border="1"><caption>Approximate data for Uncoated N-BK7 Typical Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>90</td></tr><tr><td>400</td><td>92</td></tr><tr><td>600</td><td>92.5</td></tr><tr><td>800</td><td>92.5</td></tr><tr><td>1000</td><td>92.5</td></tr><tr><td>1200</td><td>92.5</td></tr><tr><td>1400</td><td>92.5</td></tr><tr><td>1600</td><td>92.5</td></tr><tr><td>1800</td><td>92.5</td></tr><tr><td>2000</td><td>92</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	90	400	92	600	92.5	800	92.5	1000	92.5	1200	92.5	1400	92.5	1600	92.5	1800	92.5	2000	92	2200	90	Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data
Wavelength (nm)	Transmission T (%)																								
200	90																								
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Wavelength (nm)	Transmission T (%)																								
200	90																								
400	95																								
600	97																								
800	96																								
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N-BK7 with VIS-EXT Coating Typical Transmission <table border="1"><caption>Approximate data for N-BK7 with VIS-EXT Coating Typical Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>95</td></tr><tr><td>350</td><td>98</td></tr><tr><td>500</td><td>99.5</td></tr><tr><td>700</td><td>99.5</td></tr><tr><td>1000</td><td>99.5</td></tr><tr><td>1500</td><td>99.5</td></tr><tr><td>2000</td><td>98</td></tr><tr><td>2200</td><td>95</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	95	350	98	500	99.5	700	99.5	1000	99.5	1500	99.5	2000	98	2200	95	Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.						
Wavelength (nm)	Transmission T (%)																								
200	95																								
350	98																								
500	99.5																								
700	99.5																								
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2200	95																								

	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: $R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
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. 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: $R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$ 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

