

TECHSPEC[®] 75mm Dia. x 400mm FL, VIS-NIR Coated, Plano-Convex Lens



Stock **#71-874** **3 In Stock**

☐ [Other Coating Options](#)

-

1

+

S\$221^{.20}

ADD TO CART

Volume Pricing	
Qty 1-9	S\$221.20 each
Qty 10-24	S\$200.20 each
Qty 25-49	S\$176.40 each
Need More?	Request Quote

Product Downloads

General

Type:
Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):
75.00 +0.0/-0.025

<1	Centering (arcmin):
8.50	Center Thickness CT (mm):
5.07	Edge Thickness ET (mm):
73.5	Clear Aperture CA (mm):
Protective as needed	Bevel:
Optical Properties	
400.00	Effective Focal Length EFL (mm):
394.4	Back Focal Length BFL (mm):
VIS-NIR (400-1000nm)	Coating:
R _{abs} ≤0.25% @ 880nm R _{avg} ≤1.25% @ 400 - 870nm R _{avg} ≤1.25% @ 890 - 1000nm	Coating Specification:
N-BK7	Substrate: ☐
40-20	Surface Quality:
3λ	Power (P-V) @ 632.8nm:
λ/2	Irregularity (P-V) @ 632.8nm:
±1	Focal Length Tolerance (%):
206.72	Radius R ₁ (mm):
5.34	f/#:
0.09	Numerical Aperture NA:
400 - 1000	Wavelength Range (nm):
5 J/cm ² @ 532nm, 10ns	Damage Threshold, By Design: ☐
Regulatory Compliance	
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](#).

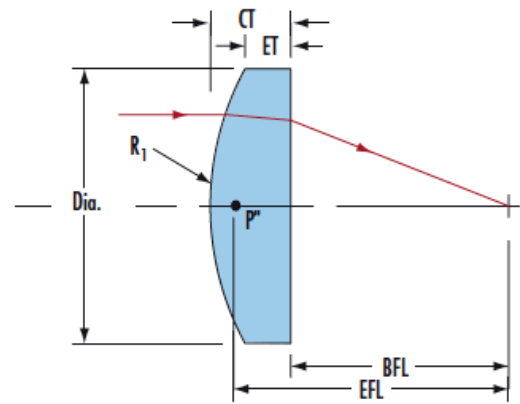
Product Details

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

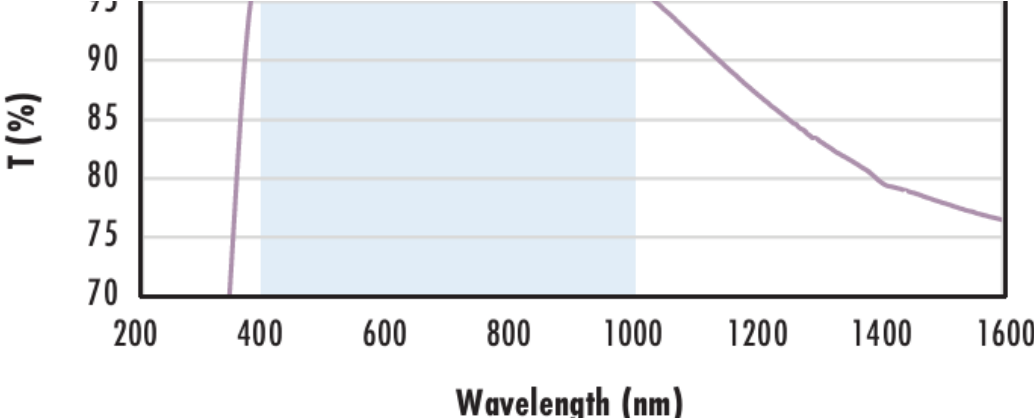
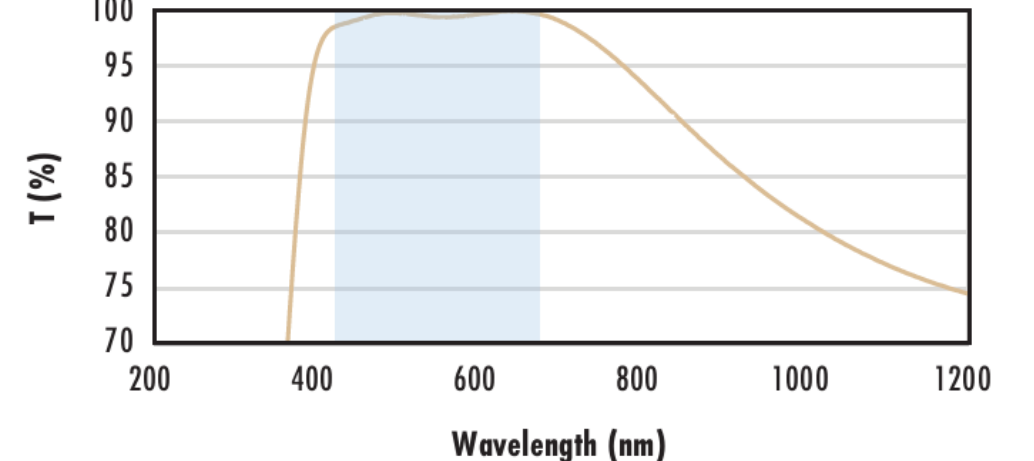
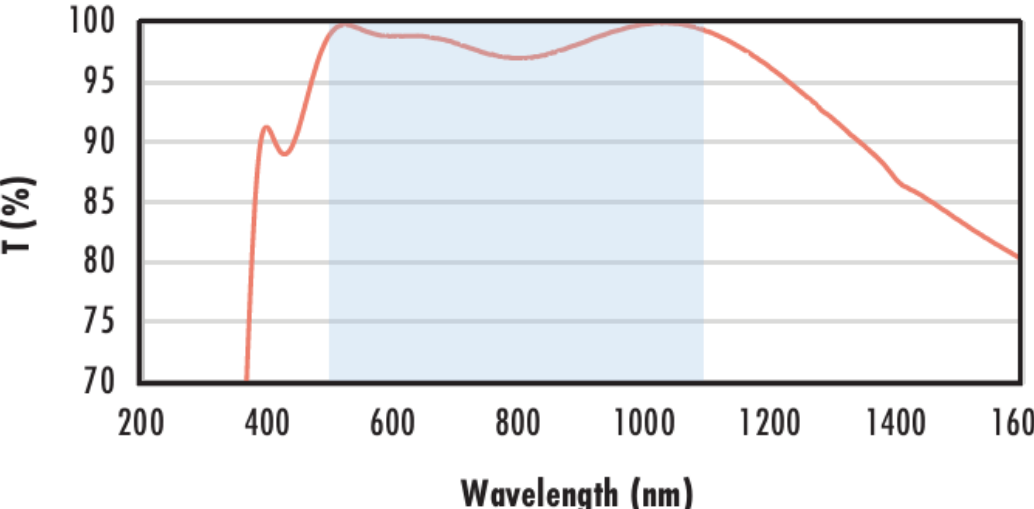
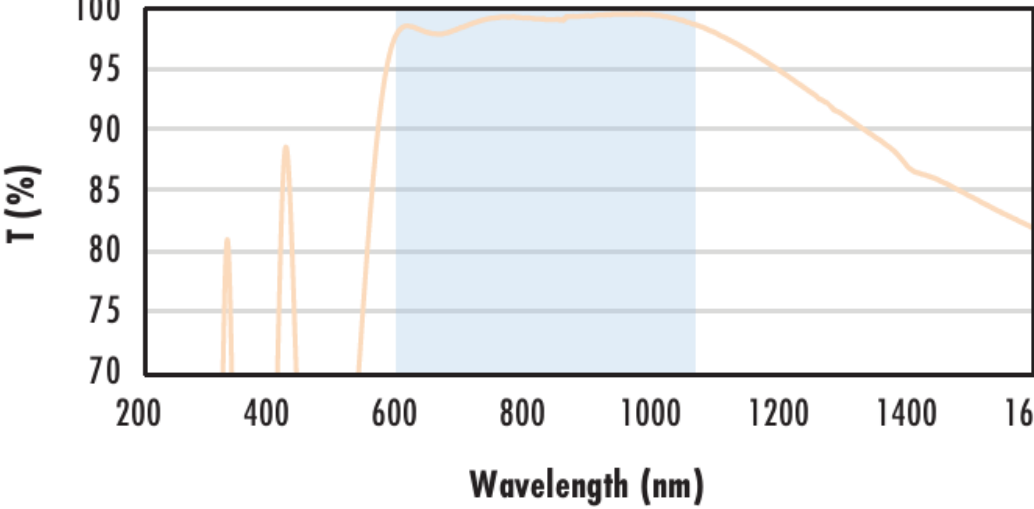
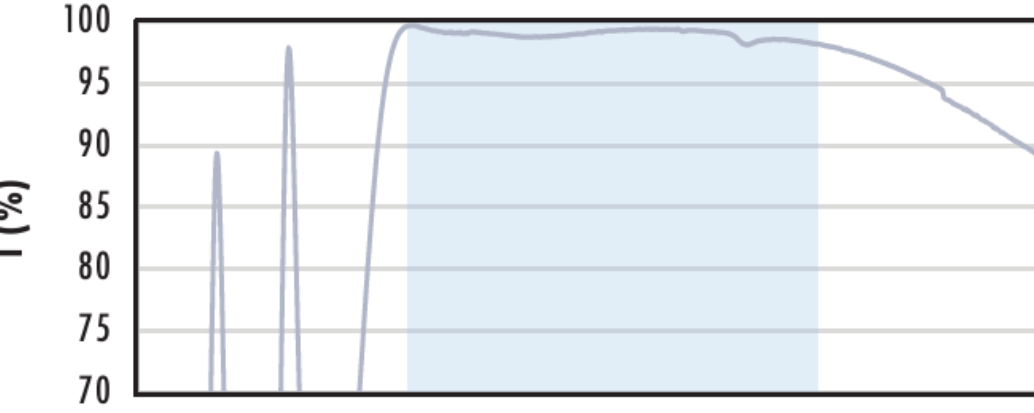
TECHSPEC® VIS-NIR Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. Plano-Convex lenses are ideal for a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

These coated lenses are optimized for a wide range of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

Technical Information



N-BK7																									
Uncoated N-BK7 Typical Transmission <table><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr><tr><td>200</td><td>70</td></tr><tr><td>400</td><td>92</td></tr><tr><td>600</td><td>92</td></tr><tr><td>800</td><td>92</td></tr><tr><td>1000</td><td>92</td></tr><tr><td>1200</td><td>92</td></tr><tr><td>1400</td><td>92</td></tr><tr><td>1600</td><td>92</td></tr><tr><td>1800</td><td>92</td></tr><tr><td>2000</td><td>92</td></tr><tr><td>2200</td><td>90</td></tr></table>	Wavelength (nm)	Transmission T (%)	200	70	400	92	600	92	800	92	1000	92	1200	92	1400	92	1600	92	1800	92	2000	92	2200	90	Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data
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N-BK7 with MgF₂ Coating Typical Transmission <table><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr><tr><td>200</td><td>70</td></tr><tr><td>400</td><td>98</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>98</td></tr><tr><td>1000</td><td>98</td></tr><tr><td>1200</td><td>98</td></tr><tr><td>1400</td><td>98</td></tr><tr><td>1600</td><td>98</td></tr><tr><td>1800</td><td>98</td></tr><tr><td>2000</td><td>98</td></tr><tr><td>2200</td><td>90</td></tr></table>	Wavelength (nm)	Transmission T (%)	200	70	400	98	600	98	800	98	1000	98	1200	98	1400	98	1600	98	1800	98	2000	98	2200	90	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
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200	70																								
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N-BK7 with VIS-EXT Coating Typical Transmission <table><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr><tr><td>200</td><td>70</td></tr><tr><td>400</td><td>98</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>98</td></tr><tr><td>1000</td><td>98</td></tr><tr><td>1200</td><td>78</td></tr></table>	Wavelength (nm)	Transmission T (%)	200	70	400	98	600	98	800	98	1000	98	1200	78	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. Click Here to Download Data										
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200	70																								
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N-BK7 with VIS-NIR Coating Typical Transmission <table><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr><tr><td>200</td><td>70</td></tr><tr><td>400</td><td>98</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>98</td></tr><tr><td>1000</td><td>98</td></tr><tr><td>1200</td><td>78</td></tr></table>	Wavelength (nm)	Transmission T (%)	200	70	400	98	600	98	800	98	1000	98	1200	78	Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.										
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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: $R_{avg} \leq 0.4\% @ 425 - 675nm$ 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 	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 	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 	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: $R_{abs} \leq 1.5\% @ 750 - 800nm$ $R_{abs} \leq 1.0\% @ 800 - 1550nm$ $R_{avg} \leq 0.7\% @ 750 - 1550nm$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data



Coating Curves

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