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TECHSPEC[®] 12.7mm Dia. x 50.8mm FL, VIS 0°, Inked, Plano-Convex Lens



Stock **#62-568-INK** [CONTACT US](#)

☐ [Other Coating Options](#)

-

1

+

₹4,680

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Volume Pricing	
Qty 1-9	₹4,680 each
Qty 10-24	₹4,208 each
Qty 25-49	₹3,758 each
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Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

12.70 ±0.025

<1	Centering (arcmin):
2.50 ±0.10	Center Thickness CT (mm):
1.72	Edge Thickness ET (mm):
11.7	Clear Aperture CA (mm):
Protective as needed	Bevel:

Optical Properties	
50.80 @ 587.6nm	Effective Focal Length EFL (mm):
49.15	Back Focal Length BFL (mm):
VIS 0° (425-675nm)	Coating:
R _{avg} ≤0.4% @ 425 - 675nm	Coating Specification:
N-BK7	Substrate: □
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
±1	Focal Length Tolerance (%):
26.25	Radius R ₁ (mm):
4	f/#:
0.13	Numerical Aperture NA:
425 - 675	Wavelength Range (nm):
5 J/cm² @ 532nm, 10ns	Damage Threshold, By Design: □

Regulatory Compliance	
View	Certificate of Conformance:
Japan	Country of Origin:
Edmund Optics India Private Limited	Imported By:

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 <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](#)

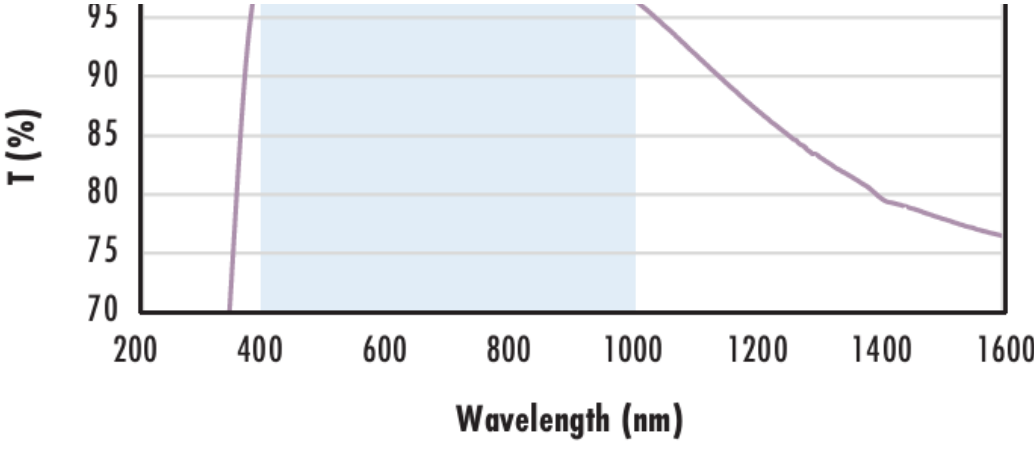
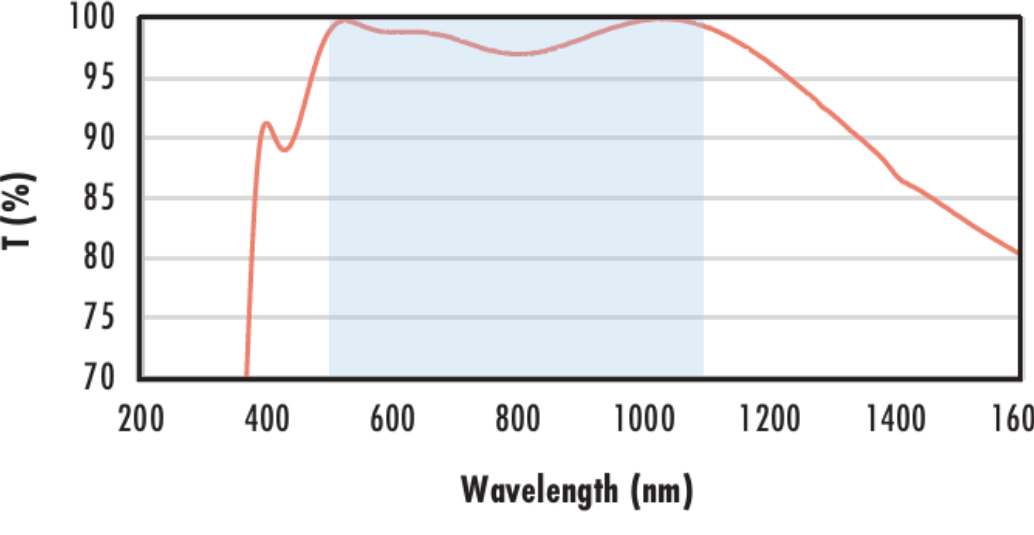
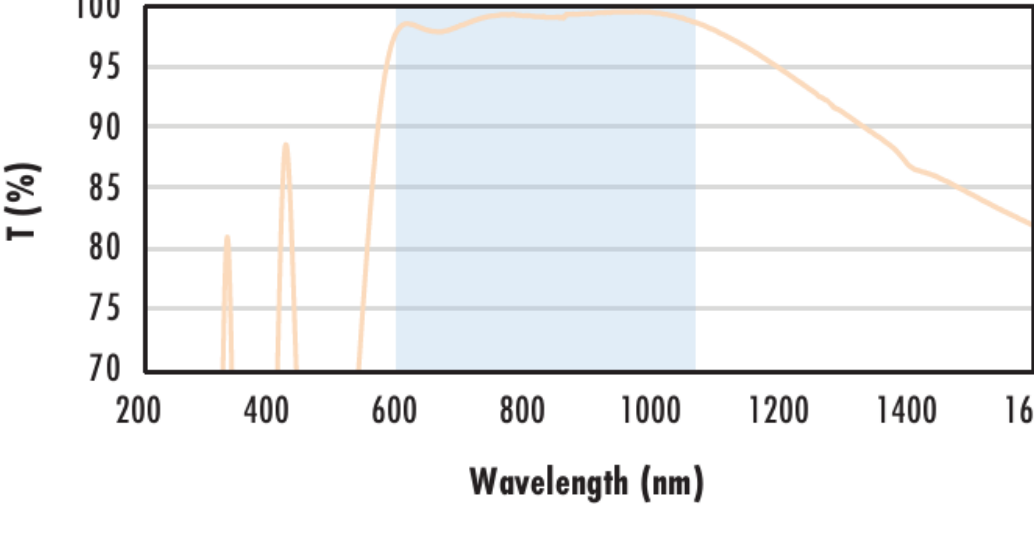
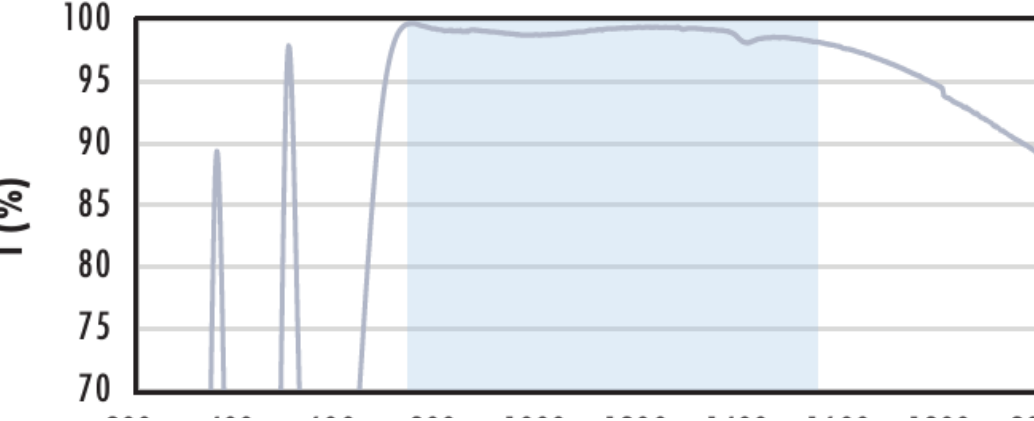
TECHSPEC® VIS 0° Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. Plano-Convex lenses are ideal for a multitude 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



N-BK7																									
Uncoated N-BK7 Typical Transmission This graph shows the typical transmission of a 3mm thick, uncoated N-BK7 window across the UV-NIR spectra. The transmission is high, starting around 90% at 200 nm and remaining above 90% up to 2200 nm. <table border="1"><thead><tr><th>Wavelength (nm)</th><th>Typical 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</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>~91</td></tr><tr><td>2200</td><td>~89</td></tr></tbody></table>	Wavelength (nm)	Typical Transmission T (%)	200	~90	400	~92	600	~92	800	~92	1000	~92	1200	~92	1400	~92	1600	~92	1800	~92	2000	~91	2200	~89	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 This graph shows the typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI. The transmission is high, starting around 90% at 200 nm and remaining above 90% up to 2200 nm. A blue shaded region indicates the coating design wavelength range from 400 nm to 700 nm. <table border="1"><thead><tr><th>Wavelength (nm)</th><th>Typical 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</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>~91</td></tr><tr><td>2200</td><td>~89</td></tr></tbody></table>	Wavelength (nm)	Typical Transmission T (%)	200	~90	400	~92	600	~92	800	~92	1000	~92	1200	~92	1400	~92	1600	~92	1800	~92	2000	~91	2200	~89	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: $R_{avg} \leq 1.75\% @ 400 - 700nm$ (N-BK7) Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
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N-BK7 with VIS-EXT Coating Typical Transmission This graph shows the typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI. The transmission is high, starting around 90% at 200 nm and remaining above 90% up to 1200 nm. A blue shaded region indicates the coating design wavelength range from 350 nm to 700 nm. <table border="1"><thead><tr><th>Wavelength (nm)</th><th>Typical 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</td></tr><tr><td>800</td><td>~92</td></tr><tr><td>1000</td><td>~92</td></tr><tr><td>1200</td><td>~89</td></tr></tbody></table>	Wavelength (nm)	Typical Transmission T (%)	200	~90	400	~92	600	~92	800	~92	1000	~92	1200	~89	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: $R_{avg} \leq 0.5\% @ 350 - 700nm$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data										
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N-BK7 with VIS-NIR Coating Typical Transmission This graph shows the typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI. The transmission is high, starting around 90% at 200 nm and remaining above 90% up to 1000 nm. A blue shaded region indicates the coating design wavelength range from 400 nm to 1000 nm. <table border="1"><thead><tr><th>Wavelength (nm)</th><th>Typical 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</td></tr><tr><td>800</td><td>~92</td></tr><tr><td>1000</td><td>~92</td></tr></tbody></table>	Wavelength (nm)	Typical Transmission T (%)	200	~90	400	~92	600	~92	800	~92	1000	~92	Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.												
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	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 	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

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

Coating Curves

Compatible Mounts

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