

TECHSPEC<sup>®</sup> 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

+

 C\$66<sup>50</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | C\$66.50 each                 |
| Qty 10-25      | C\$59.50 each                 |
| Qty 26-49      | C\$53.20 each                 |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Plano-Concave Lens

Type:

Physical & Mechanical Properties

Diameter (mm):

|                                                                                                                    |                                                       |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 6.00 +0.0/-0.025                                                                                                   |                                                       |
| 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: <input type="checkbox"/>                   |
| 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 <sub>abs</sub> ≤0.25% @ 880nm<br>R <sub>avg</sub> ≤1.25% @ 400 - 870nm<br>R <sub>avg</sub> ≤1.25% @ 890 - 1000nm | Coating Specification:                                |
| 587.6                                                                                                              | Focal Length Specification Wavelength (nm):           |
| ±1                                                                                                                 | Focal Length Tolerance (%):                           |
| -4.71                                                                                                              | Radius R <sub>1</sub> (mm):                           |
| 40-20                                                                                                              | Surface Quality:                                      |
| 5 J/cm² @ 532nm, 10ns                                                                                              | Damage Threshold, By Design: <input type="checkbox"/> |
| 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:                           |

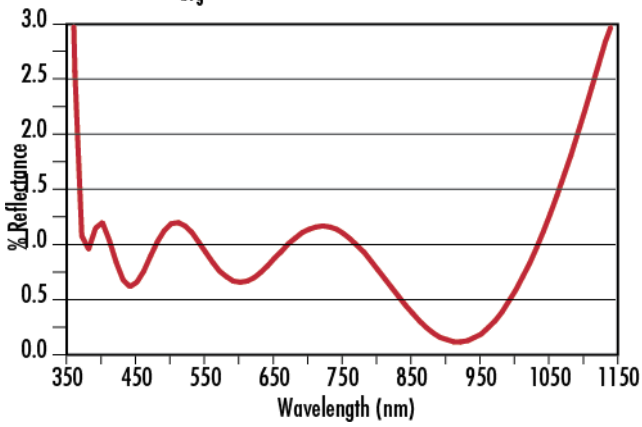
## Product Details

- 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](#), [MgF<sub>2</sub>](#), [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](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), or with [NIR II](#) AR coating options.

## Technical Information

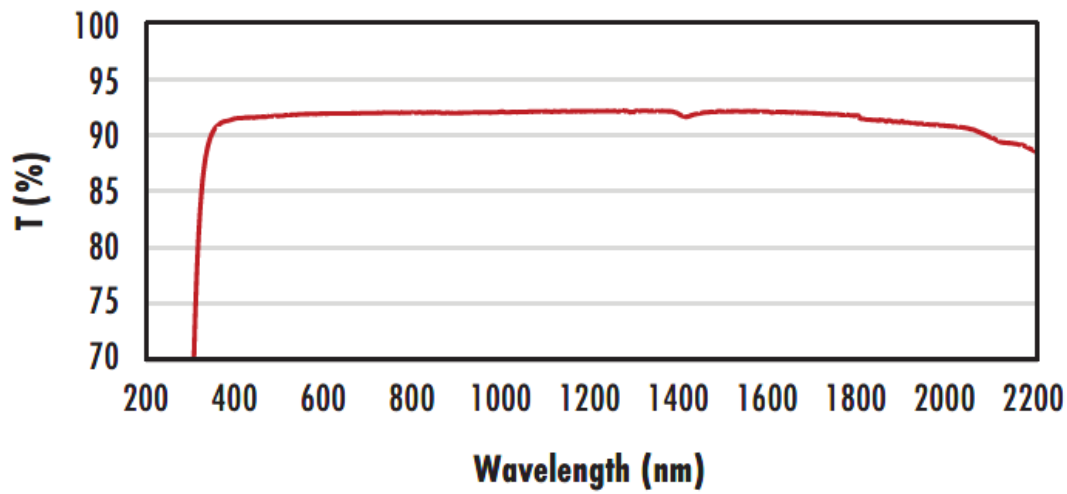


**VIS-NIR Coating**  
 $R_{\text{obs}} \leq 0.25\% @ 880\text{nm}$   
 $R_{\text{avg}} \leq 1.25\% @ 400-1000\text{nm}$



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 $\text{MgF}_2$ Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with  $\text{MgF}_2$  (400-700nm) coating at  $0^\circ$  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  $0^\circ$  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](#)





## 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