

TECHSPEC<sup>®</sup> 6.0mm Diameter x -9 FL, MgF<sub>2</sub> Coated, Plano-Concave Lens



Stock **#48-337** 16 In Stock

☐ [Other Coating Options](#)

-

1

+

₹2,764

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | ₹2,764 each                   |
| Qty 10-25      | ₹2,472 each                   |
| Qty 26-49      | ₹2,219 each                   |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Type:

Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):

6.00 +0.0/-0.025

|                                  |        |
|----------------------------------|--------|
|                                  | Bevel: |
| Protective as needed             |        |
|                                  |        |
| Center Thickness CT (mm):        | 1.50   |
| Center Thickness Tolerance (mm): | ±0.05  |
|                                  |        |
| Centering (arcmin):              | <3     |
| Clear Aperture CA (mm):          | 5.4    |
|                                  |        |
| Edge Thickness ET (mm):          | 2.04   |

Optical Properties

|                                                       |                                       |
|-------------------------------------------------------|---------------------------------------|
| Effective Focal Length EFL (mm):                      | -9.00                                 |
| Substrate: <input type="checkbox"/>                   | N-SF11                                |
|                                                       |                                       |
| f#:                                                   | 1.5                                   |
| Numerical Aperture NA:                                | 0.33                                  |
|                                                       |                                       |
| Coating:                                              | MgF <sub>2</sub> (400-700nm)          |
| Wavelength Range (nm):                                | 400 - 700                             |
|                                                       |                                       |
| Back Focal Length BFL (mm):                           | -9.84                                 |
| Coating Specification:                                | R <sub>avg</sub> ≤1.75% @ 400 - 700nm |
|                                                       |                                       |
| Focal Length Specification Wavelength (nm):           | 587.6                                 |
| Focal Length Tolerance (%):                           | ±1                                    |
|                                                       |                                       |
| Radius R <sub>1</sub> (mm):                           | -7.06                                 |
| Surface Quality:                                      | 40-20                                 |
|                                                       |                                       |
| Damage Threshold, By Design: <input type="checkbox"/> | 10 J/cm <sup>2</sup> @ 532nm, 10ns    |
| Power (P-V) @ 632.8nm:                                | 1.5λ                                  |
|                                                       |                                       |
| Irregularity (P-V) @ 632.8nm:                         | λ/4                                   |

Regulatory Compliance

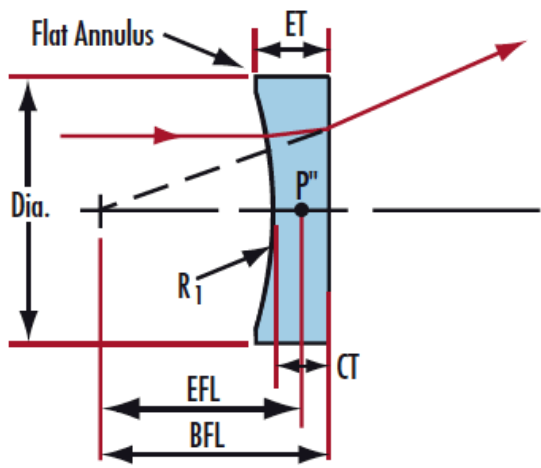
|                             |                                     |
|-----------------------------|-------------------------------------|
| RoHS 2015:                  | Compliant                           |
| Certificate of Conformance: | View                                |
|                             |                                     |
| Reach 235:                  | Compliant                           |
|                             |                                     |
| Country of Origin:          | Japan                               |
| Imported By:                | Edmund Optics India Private Limited |

Product Details

- AR Coated to Provide <1.75% Reflectance per Surface for 400 - 700nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [VIS 0°](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® MgF<sub>2</sub> 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 MgF<sub>2</sub> Coated Plano-Concave (PCV) Lenses are ideal for broadband applications. These lenses are also available [Uncoated](#), [VIS-EXT](#), [VIS 0°](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), or with [NIR II](#) AR coating options.

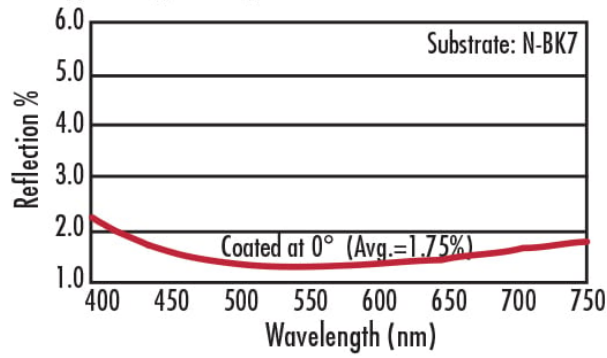
Technical Information



**MgF<sub>2</sub> Coating**

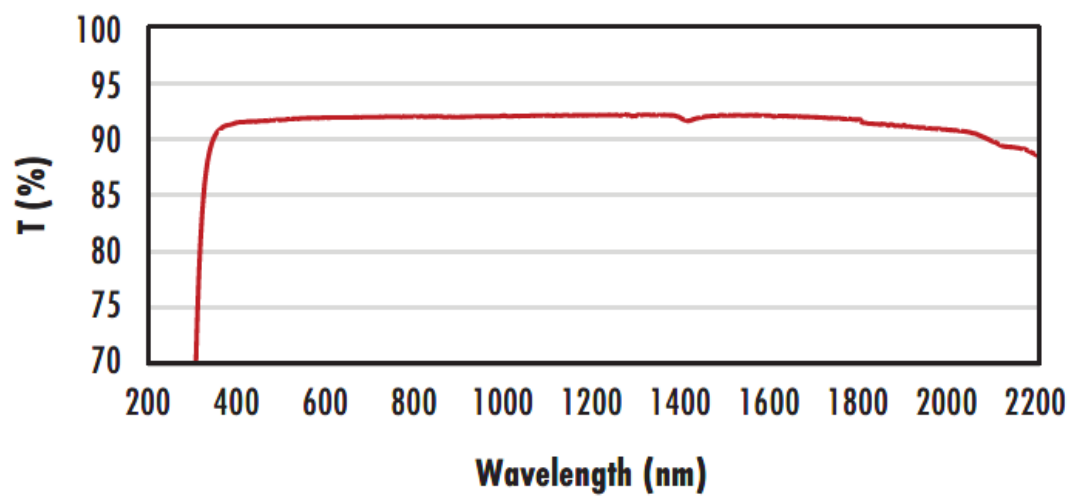
$R_{avg} \leq 1.75\%$  @ 400 - 700nm

Typ. Energy Density Limit: 10 J/cm<sup>2</sup> @ 532nm, 10ns



**N-BK7**

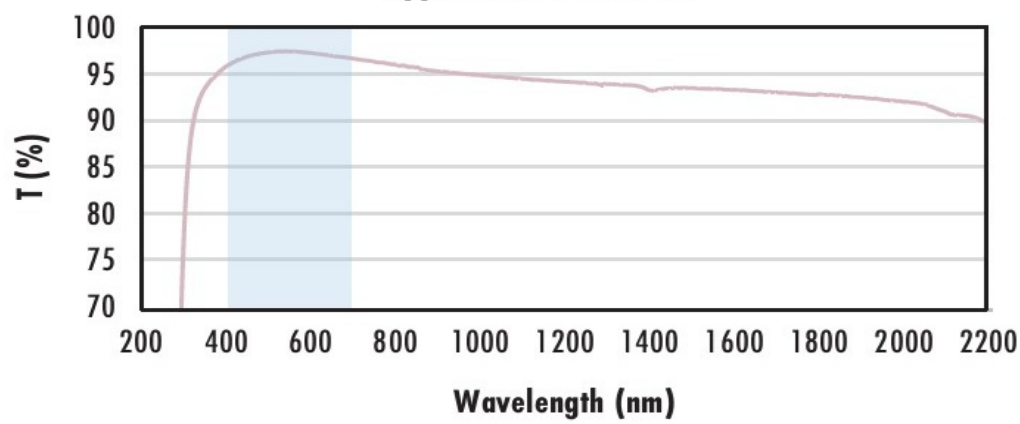
**Uncoated N-BK7 Typical Transmission**



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

[Click Here to Download Data](#)

**N-BK7 with MgF<sub>2</sub> Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

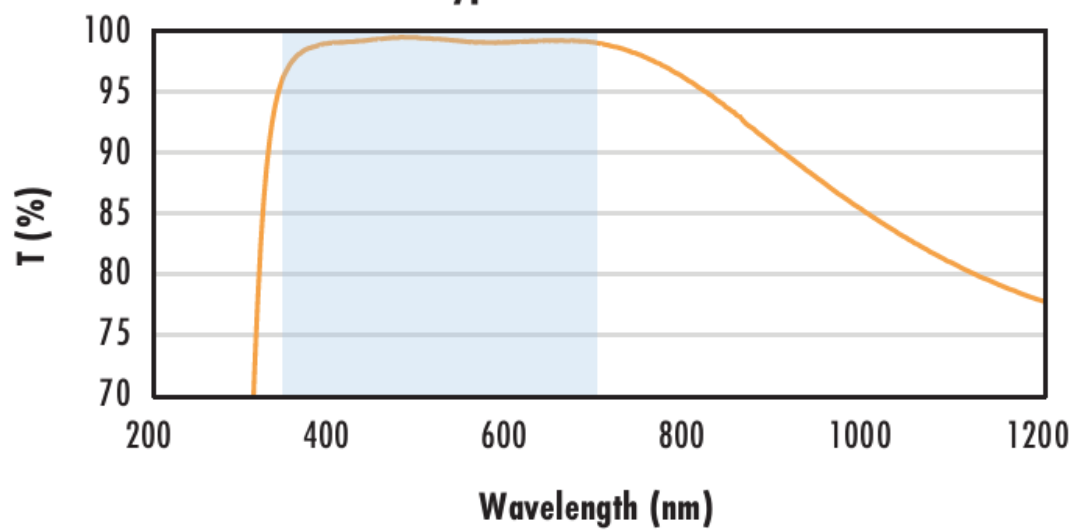
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 1.75\%$  @ 400 - 700nm (N-BK7)

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

[Click Here to Download Data](#)

**N-BK7 with VIS-EXT Coating  
Typical Transmission**



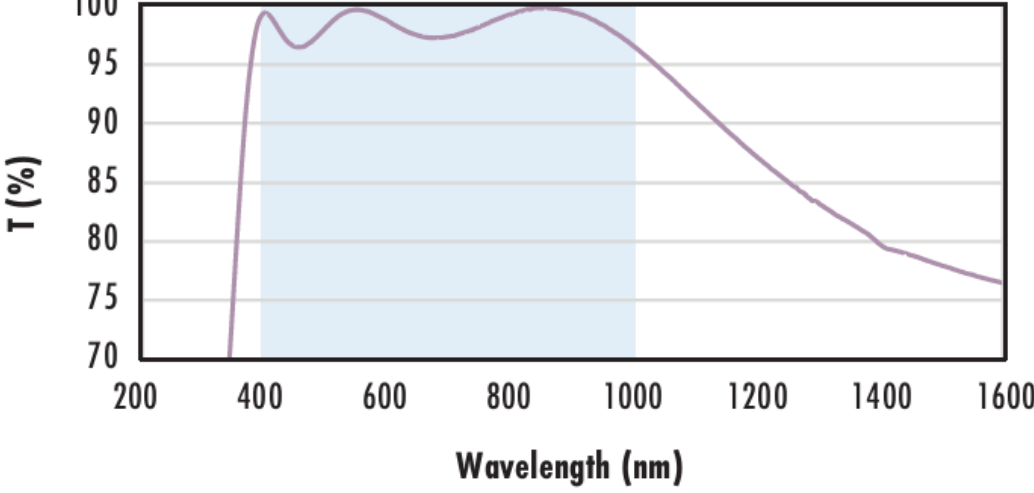
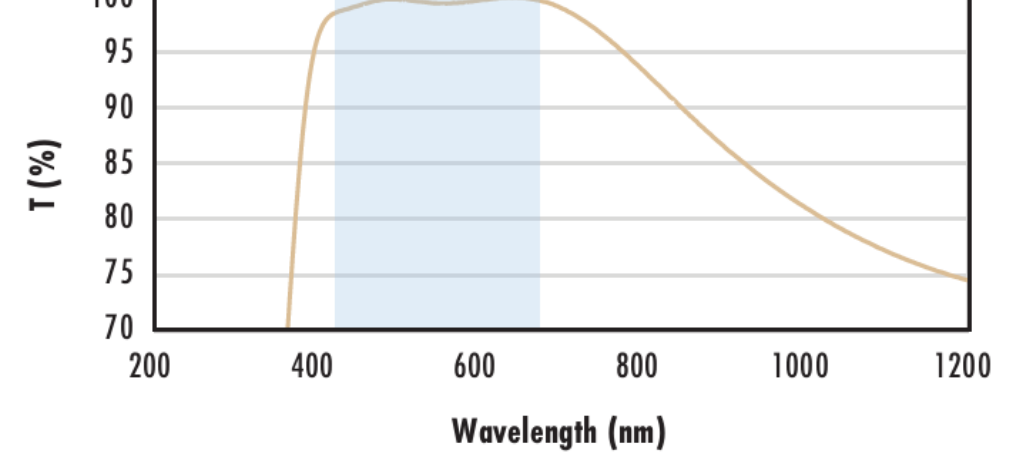
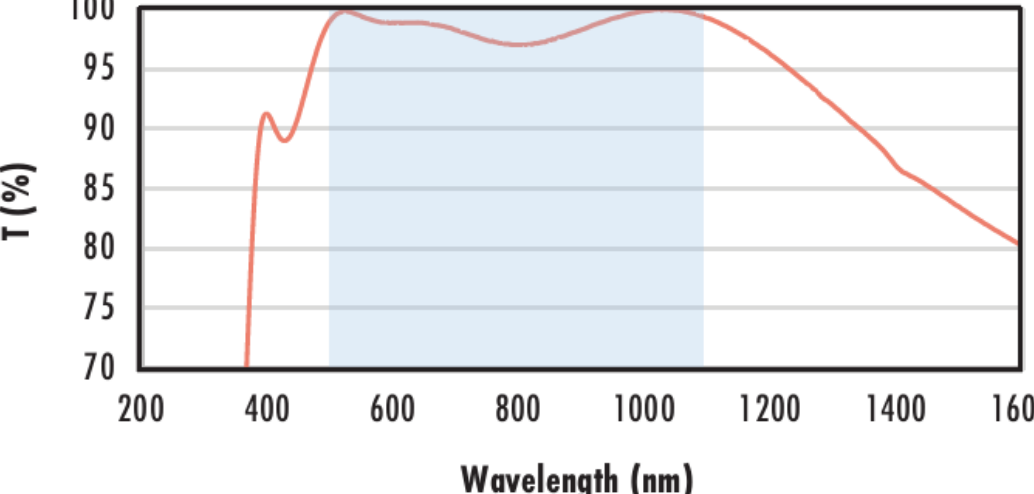
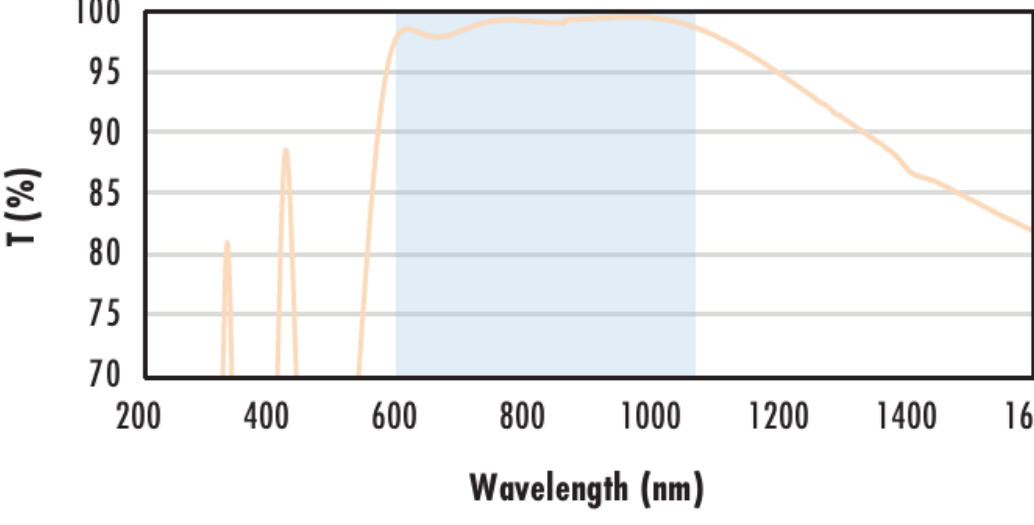
Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

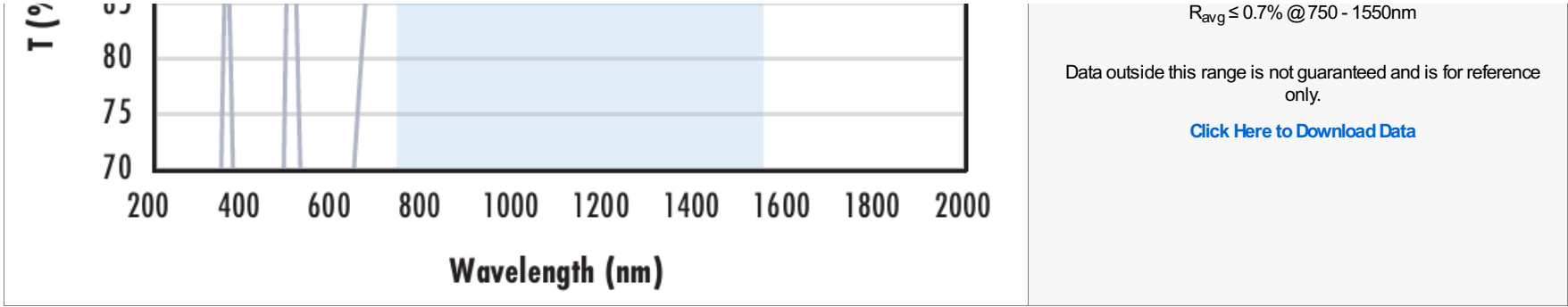
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

|                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div><div>N-BK7 with VIS-NIR Coating</div><div>Typical Transmission</div></div><div></div></div>    | <p>Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\% @ 880\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p> |
| <div><div><div>N-BK7 with VIS 0° Coating</div><div>Typical Transmission</div></div><div></div></div>    | <p>Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                   |
| <div><div><div>N-BK7 with YAG-BBAR Coating</div><div>Typical Transmission</div></div><div></div></div> | <p>Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math><br/><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math><br/><math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>      |
| <div><div><div>N-BK7 with NIR I Coating</div><div>Typical Transmission</div></div><div></div></div>    | <p>Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                |
| <div><div><div>N-BK7 with NIR II Coating</div><div>Typical Transmission</div></div><div></div></div>   | <p>Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.5\% @ 750 - 800\text{nm}</math><br/><math>R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}</math></p>                                                                                                                                                                                     |



## 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