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TECHSPEC<sup>®</sup> 25mm Dia. x 50mm FL, VIS-NIR Coated, Double-Convex Lens



Stock **#45-890** **7 In Stock**

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-

1

+

₹4,009

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| Volume Pricing |                               |
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| Qty 1-9        | ₹4,009 each                   |
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General

Type:

Double-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

25.00 +0.0/-0.025

|                      |                                  |
|----------------------|----------------------------------|
| <1                   | Centering (arcmin):              |
|                      | Bevel:                           |
| Protective as needed |                                  |
|                      | Center Thickness CT (mm):        |
| 5.00                 |                                  |
|                      | Center Thickness Tolerance (mm): |
| ±0.10                |                                  |
|                      | Edge Thickness ET (mm):          |
| 1.88                 |                                  |

|       |                         |
|-------|-------------------------|
|       | Clear Aperture CA (mm): |
| 24.00 |                         |

Optical Properties

|       |                                  |
|-------|----------------------------------|
|       | Back Focal Length BFL (mm):      |
| 48.29 |                                  |
|       | Effective Focal Length EFL (mm): |
| 50.00 |                                  |

|                                                                                                                     |                        |
|---------------------------------------------------------------------------------------------------------------------|------------------------|
|                                                                                                                     | Coating:               |
| VIS-NIR (400-1000nm)                                                                                                |                        |
|                                                                                                                     | Coating Specification: |
| R <sub>abs</sub> ≤0.25% @ 880nm<br>R <sub>avg</sub> ≤1.25% @ 400 - 870 nm<br>R <sub>avg</sub> ≤1.25% @ 890 - 1000nm |                        |

|                       |                                     |
|-----------------------|-------------------------------------|
|                       | Substrate: <input type="checkbox"/> |
| <a href="#">N-BK7</a> |                                     |
|                       | Surface Quality:                    |
| 40-20                 |                                     |

|      |                               |
|------|-------------------------------|
|      | Power (P-V) @ 632.8nm:        |
| 1.5λ |                               |
|      | Irregularity (P-V) @ 632.8nm: |
| λ/4  |                               |

|       |                                             |
|-------|---------------------------------------------|
|       | Radius R <sub>1</sub> =R <sub>2</sub> (mm): |
| 50.80 |                                             |
|       | f/#:                                        |
| 2.00  |                                             |

|       |                                             |
|-------|---------------------------------------------|
|       | Focal Length Specification Wavelength (nm): |
| 587.6 |                                             |
|       | Focal Length Tolerance (%):                 |
| ±1    |                                             |

|            |                        |
|------------|------------------------|
|            | Numerical Aperture NA: |
| 0.25       |                        |
|            | Wavelength Range (nm): |
| 400 - 1000 |                        |

|                                   |                                                       |
|-----------------------------------|-------------------------------------------------------|
|                                   | Damage Threshold, By Design: <input type="checkbox"/> |
| 5 J/cm <sup>2</sup> @ 532nm, 10ns |                                                       |

Regulatory Compliance

|                           |                             |
|---------------------------|-----------------------------|
|                           | RoHS 2015:                  |
| <a href="#">Compliant</a> |                             |
|                           | Certificate of Conformance: |
| <a href="#">View</a>      |                             |

|                                     |                    |
|-------------------------------------|--------------------|
|                                     | Reach 235:         |
| <a href="#">Compliant</a>           |                    |
|                                     | Country of Origin: |
| Japan                               |                    |
|                                     | Imported By:       |
| Edmund Optics India Private Limited |                    |

Product Details

- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
  - Minimize Aberrations Including Spherical and Coma
  - [UV Fused Silica DCX Lenses](#) Available
  - Other Coating Options Available: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)
- TECHSPEC® VIS-NIR Coated Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) between 0.2 and 5. At a conjugate ratio of 1, aberrations such as spherical aberration, chromatic aberration, coma, and distortion are minimized or cancelled due to the symmetric lens design. TECHSPEC® VIS-NIR Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

Technical Information



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:

$R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$  (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° 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.

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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.

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Typical transmission of a 3mm thick N-BK7 window with MS 0° (425-675nm) coating at 0° AOI.

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

$$R_{\text{avg}} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$$

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

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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:

$$R_{\text{abs}} \leq 0.25\% @ 532\text{nm}$$
$$R_{\text{abs}} \leq 0.25\% @ 1064\text{nm}$$
$$R_{\text{avg}} \leq 1.0\% @ 500 - 1100\text{nm}$$

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

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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:

$$R_{\text{avg}} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$$

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

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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:

$$R_{\text{abs}} \leq 1.5\% \text{ @ } 750 - 800\text{nm}$$
$$R_{\text{abs}} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}$$
$$R_{\text{avg}} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}$$

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

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# 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

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