

TECHSPEC® 3mm Dia. x 6mm FL VIS-EXT Coated, Double-Convex Lens



Stock #89-120 **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ C\$103⁰⁰

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| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-9 | C\$103.60 each |
| Qty 10-24 | C\$93.80 each |
| Qty 25-99 | C\$82.60 each |
| Need More? | Request Quote |

Product Downloads

General

Double-Convex Lens **Type:**

Physical & Mechanical Properties

3.00 +0.000/-0.025 **Diameter (mm):**

| | |
|--------------------------------------|---|
| <3 | Centering (arcmin): |
| Protective as needed | Bevel: |
| 1.80 | Center Thickness CT (mm): |
| ±0.05 | Center Thickness Tolerance (mm): |
| 1.41 | Edge Thickness ET (mm): |
| 2.5 | Clear Aperture CA (mm): |
| Optical Properties | |
| 5.37 | Back Focal Length BFL (mm): |
| 6.00 | Effective Focal Length EFL (mm): |
| VIS-EXT (350-700nm) | Coating: |
| R _{avg} <0.5% @ 350 - 700nm | Coating Specification: |
| N-BK7 | Substrate: <input type="checkbox"/> |
| 20-10 | Surface Quality: |
| 1.5λ | Power (P-V) @ 632.8nm: |
| λ/4 | Irregularity (P-V) @ 632.8nm: |
| 5.88 | Radius R ₁ =R ₂ (mm): |
| 2.00 | f#: |
| 587.6 | Focal Length Specification Wavelength (nm): |
| ±1 | Focal Length Tolerance (%): |
| 0.25 | Numerical Aperture NA: |
| 350 - 700 | Wavelength Range (nm): |

| | |
|------------------------------|-----------------------------|
| Regulatory Compliance | |
| Compliant | RoHS 2015: |
| View | Certificate of Conformance: |
| Compliant | Reach 235: |

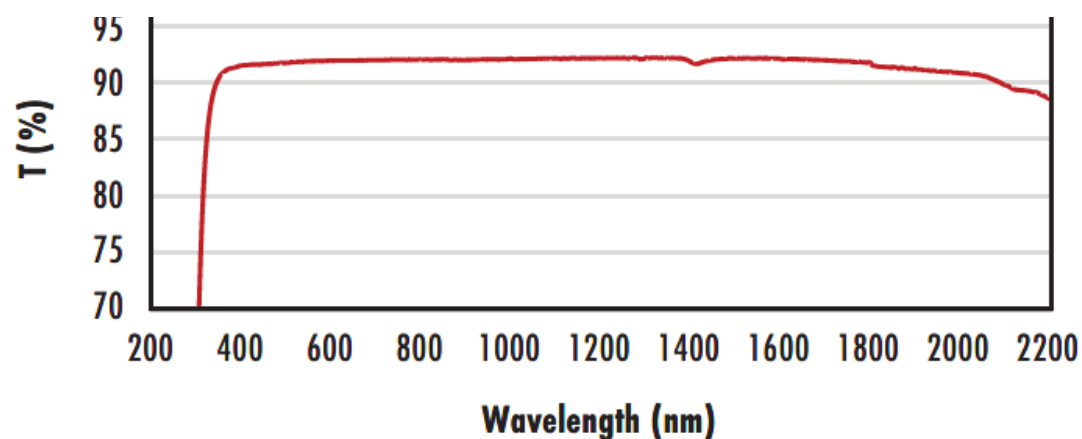
Product Details

- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- Minimize Aberrations Including Spherical and Coma
- [UV Fused Silica DCX Lenses](#) Available
- Other Coating Options Available: [Uncoated](#), [MgF₂](#), [VIS 0°](#), [NIR I](#), [NIR II](#), [VIS-NIR](#), and [YAG-BBAR](#)

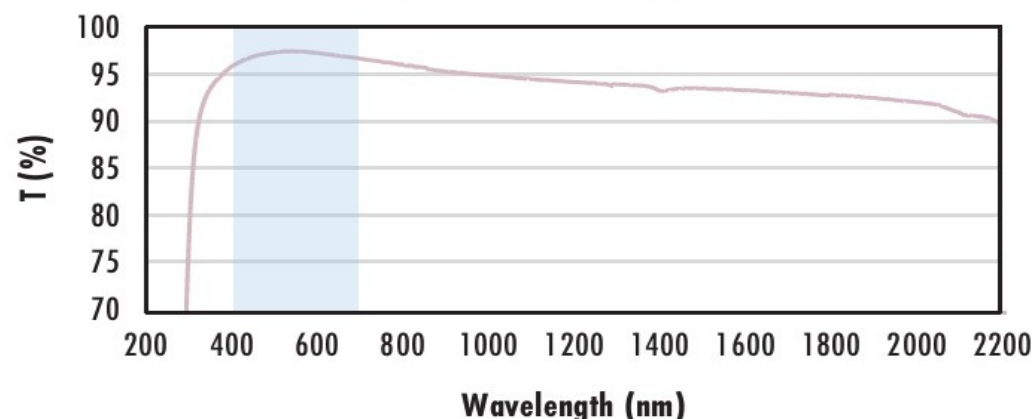
TECHSPEC® VIS-EXT Coated Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) 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-EXT Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

Technical Information

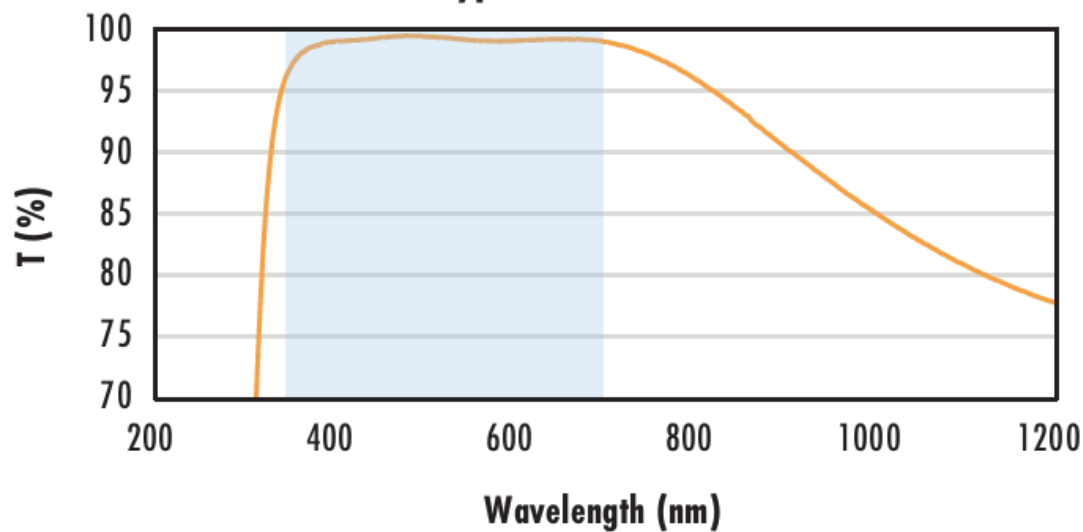




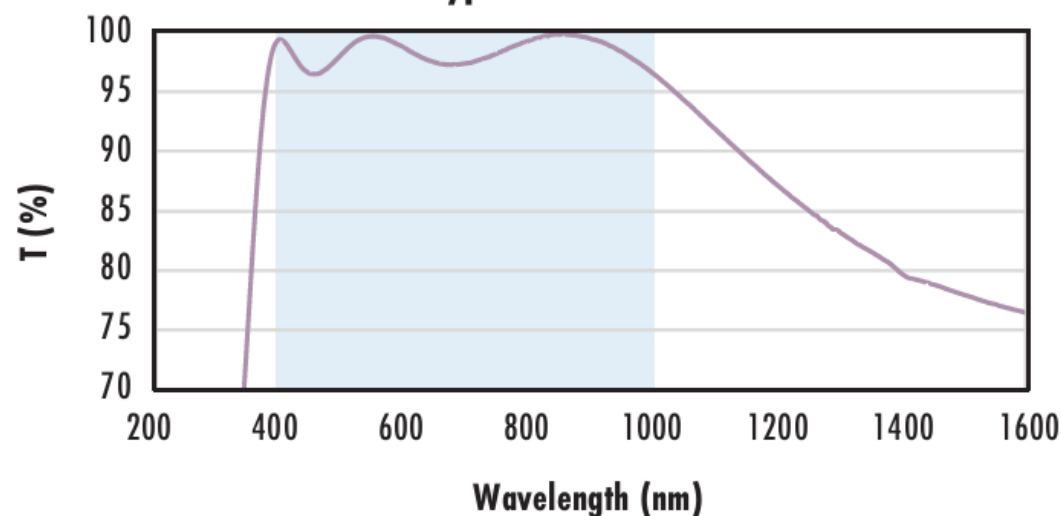
**N-BK7 with MgF₂ Coating
Typical Transmission**



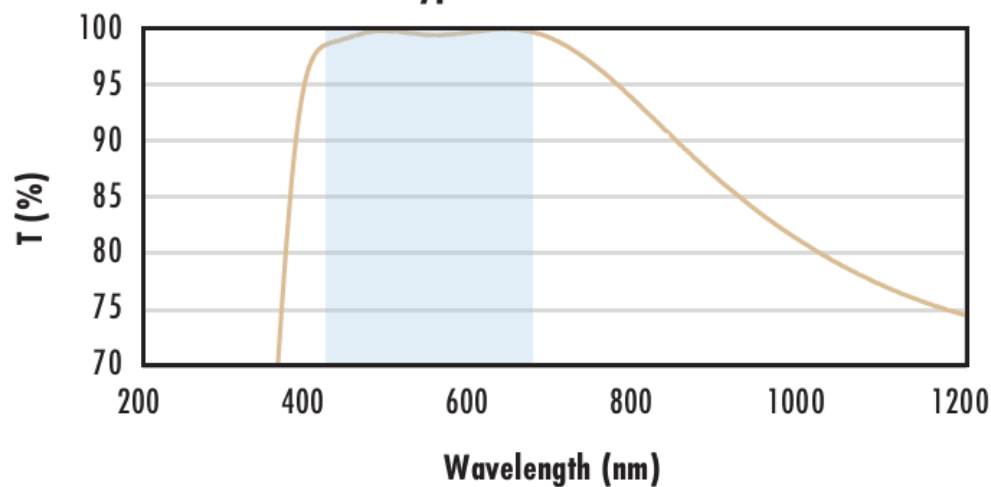
**N-BK7 with VIS-EXT Coating
Typical Transmission**



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



**N-BK7 with VIS 0° Coating
Typical Transmission**



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:

$$R_{abs} \leq 0.25\% @ 532\text{nm}$$

$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

$$R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$$

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

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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.

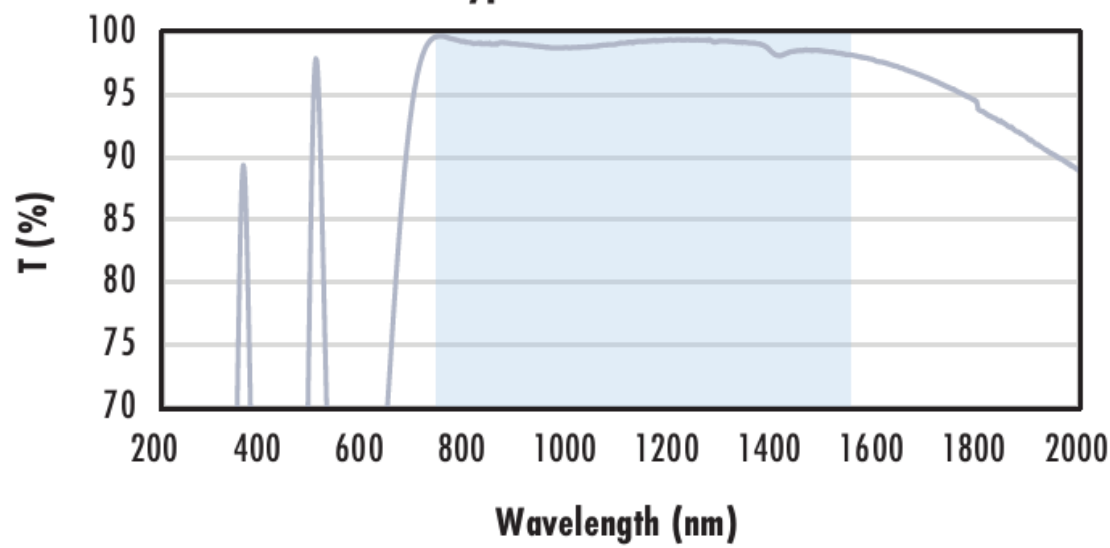
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

$$R_{abs} \leq 1.5\% @ 750 - 800\text{nm}$$

$$R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$$

$$R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$$

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

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