

TECHSPEC[®] 25mm Dia. x 40mm FL VIS-EXT Coated, Double-Convex Lens



Stock **#89-178** **1 In Stock**

☐ [Other Coating Options](#)

-

1

+

A\$90⁴⁰

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Volume Pricing	
Qty 1-9	A\$90.40 each
Qty 10-24	A\$80.80 each
Qty 25-99	A\$72.40 each
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SPECIFICATIONS

General

Type:

Double-Convex Lens	
Physical & Mechanical Properties	
25.00 +0.000/-0.025	Diameter (mm):
<1	Centering (arcmin):
Protective as needed	Bevel:
5.30	Center Thickness CT (mm):
±0.10	Center Thickness Tolerance (mm):
1.34	Edge Thickness ET (mm):
24.00	Clear Aperture CA (mm):
Optical Properties	
38.21	Back Focal Length BFL (mm):
40.00	Effective Focal Length EFL (mm):
VIS-EXT (350-700nm)	Coating:
R _{avg} <0.5% @ 350 - 700nm	Coating Specification:
N-BK7	Substrate: <input type="text"/>
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
40.42	Radius R ₁ =R ₂ (mm):
1.6	f/#:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
0.31	Numerical Aperture NA:
350 - 700	Wavelength Range (nm):
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

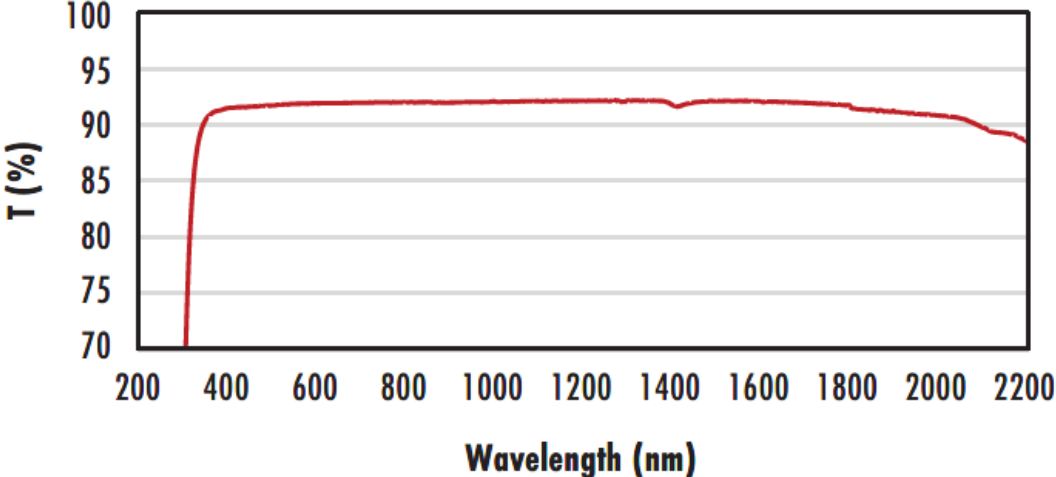
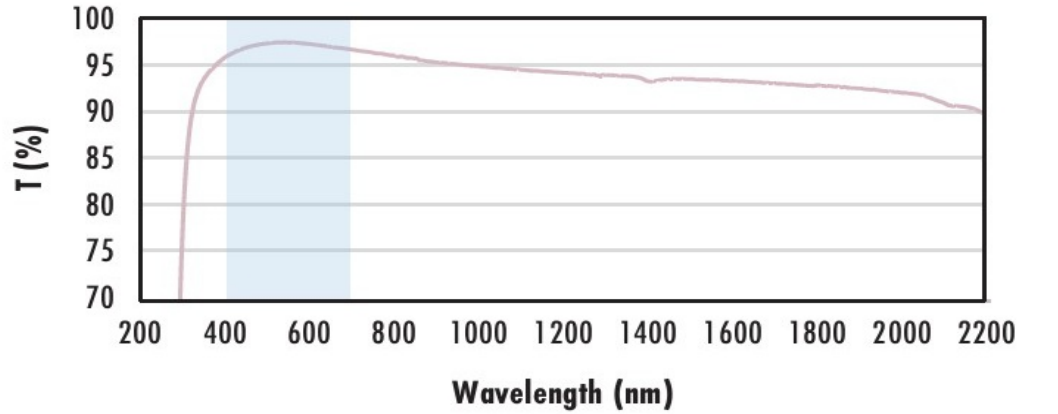
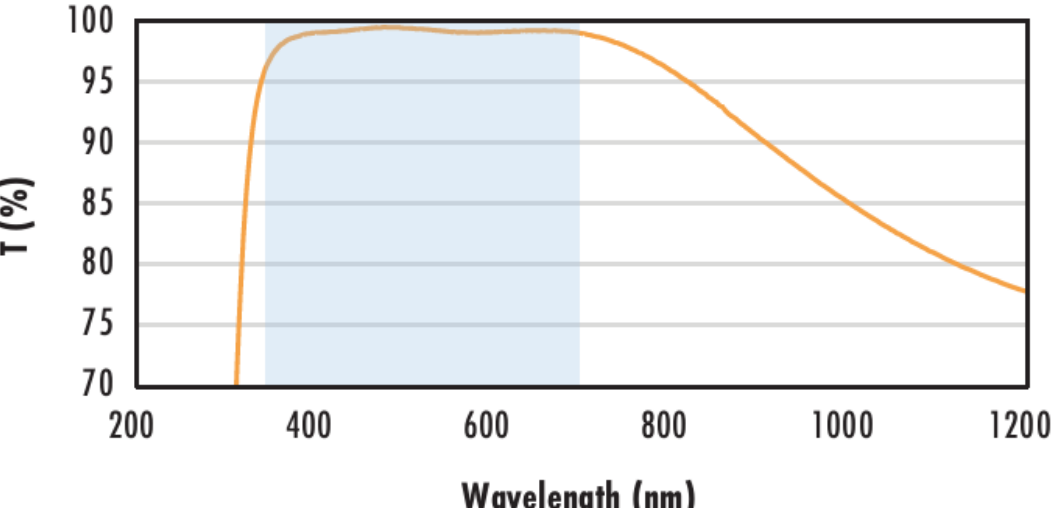
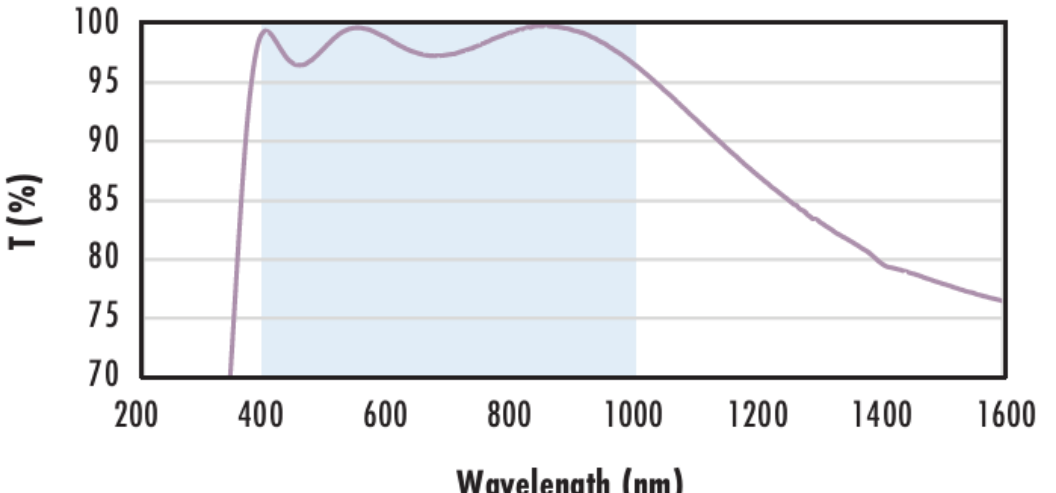
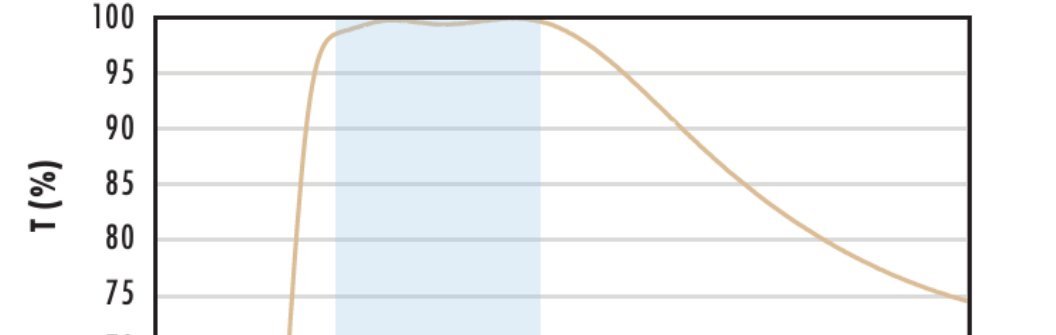
PRODUCT DETAILS

- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- Mnimize 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



<p data-bbox="527 71 1087 121">Uncoated N-BK7 Typical Transmission</p> 	<p data-bbox="1339 278 1839 329">Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.</p> <p data-bbox="1472 344 1707 365">Click Here to Download Data</p>
<p data-bbox="590 676 957 756">N-BK7 with MgF₂ Coating Typical Transmission</p> 	<p data-bbox="1339 759 1839 810">Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI.</p> <p data-bbox="1331 825 1848 875">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1436 884 1743 914">$R_{avg} \leq 1.75\% @ 400 - 700\text{nm (N-BK7)}$</p> <p data-bbox="1339 923 1839 973">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 988 1707 1009">Click Here to Download Data</p>
<p data-bbox="590 1190 1018 1282">N-BK7 with VIS-EXT Coating Typical Transmission</p> 	<p data-bbox="1331 1359 1848 1409">Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1331 1424 1848 1475">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 1484 1701 1513">$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$</p> <p data-bbox="1339 1522 1839 1573">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1587 1707 1608">Click Here to Download Data</p>
<p data-bbox="590 1834 1005 1926">N-BK7 with VIS-NIR Coating Typical Transmission</p> 	<p data-bbox="1331 1949 1848 2000">Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1331 2015 1848 2065">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1465 2077 1709 2148">$R_{abs} \leq 0.25\% @ 880\text{nm}$ $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$</p> <p data-bbox="1339 2184 1839 2234">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 2249 1707 2270">Click Here to Download Data</p>
<p data-bbox="596 2457 976 2546">N-BK7 with VIS 0° Coating Typical Transmission</p> 	<p data-bbox="1339 2588 1839 2638">Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p data-bbox="1331 2653 1848 2703">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p data-bbox="1478 2712 1701 2742">$R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$</p> <p data-bbox="1339 2751 1839 2801">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 2816 1707 2837">Click Here to Download Data</p>

<div>20040060080010001200</div> <div>Wavelength (nm)</div>	
<div><div><div>N-BK7 with YAG-BBAR Coating</div><div>Typical Transmission</div></div><div><div><div>T (%)</div><div>100959085807570</div></div><div><div><div>2004006008001000120014001600</div><div>Wavelength (nm)</div></div></div></div></div>	<div><div>Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div><div>$R_{abs} \leq 0.25\%$ @ 532nm</div><div>$R_{abs} \leq 0.25\%$ @ 1064nm</div><div>$R_{avg} \leq 1.0\%$ @ 500 - 1100nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div>Click Here to Download Data</div></div></div>
<div><div><div>N-BK7 with NIR I Coating</div><div>Typical Transmission</div></div><div><div><div>T (%)</div><div>100959085807570</div></div><div><div><div>2004006008001000120014001600</div><div>Wavelength (nm)</div></div></div></div></div>	<div><div>Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div>$R_{avg} \leq 0.5\%$ @ 600 - 1050nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div>Click Here to Download Data</div></div>
<div><div><div>N-BK7 with NIR II Coating</div><div>Typical Transmission</div></div><div><div><div>T (%)</div><div>100959085807570</div></div><div><div><div>200400600800100012001400160018002000</div><div>Wavelength (nm)</div></div></div></div></div>	<div><div>Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div><div>$R_{abs} \leq 1.5\%$ @ 750 - 800nm</div><div>$R_{abs} \leq 1.0\%$ @ 800 - 1550nm</div><div>$R_{avg} \leq 0.7\%$ @ 750 - 1550nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div>Click Here to Download Data</div></div></div>

COMPATIBLE MOUNTS