

TECHSPEC<sup>®</sup> 12mm Dia. x 30mm FL VIS-EXT Coated, Double-Convex Lens



Stock **#89-153** **6 In Stock**

☐ [Other Coating Options](#)

-

1

+

£41<sup>20</sup>

ADD TO CART

Volume Pricing	
Qty 1-9	£41.20 each
Qty 10-24	£37.00 each
Qty 25-99	£33.00 each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Double-Convex Lens	Type:
Physical & Mechanical Properties	
12.00 +0.000/-0.025	Diameter (mm):
<1	Centering (arcmin):
Protective as needed	Bevel:
3.70	Center Thickness CT (mm):
±0.05	Center Thickness Tolerance (mm):
2.5	Edge Thickness ET (mm):
11.00	Clear Aperture CA (mm):
Optical Properties	
28.75	Back Focal Length BFL (mm):
30.00	Effective Focal Length EFL (mm):
VIS-EXT (350-700nm)	Coating:
R <sub>avg</sub> <0.5% @ 350 - 700nm	Coating Specification:
N-BK7	Substrate: <input type="checkbox"/>
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
30.36	Radius R <sub>1</sub> =R <sub>2</sub> (mm):
2.5	f/#:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
0.20	Numerical Aperture NA:
350 - 700	Wavelength Range (nm):
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

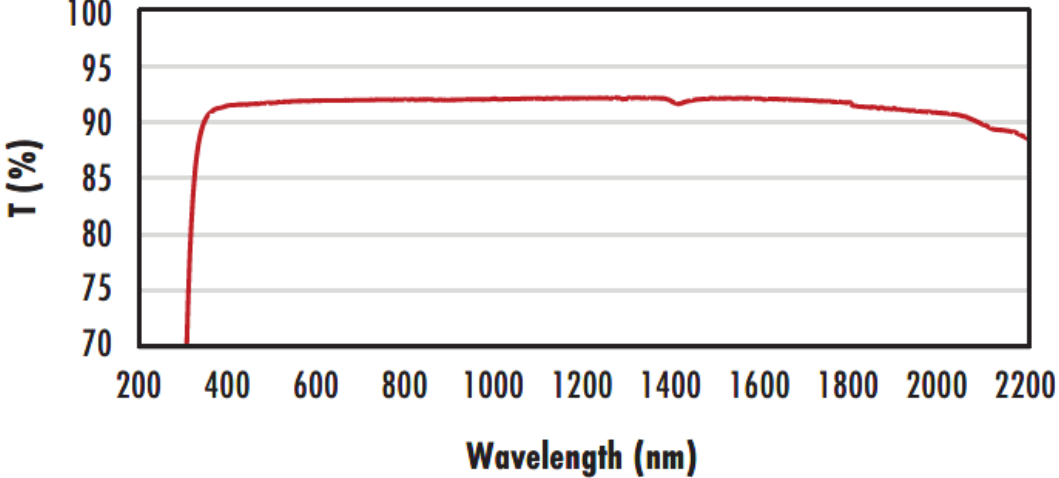
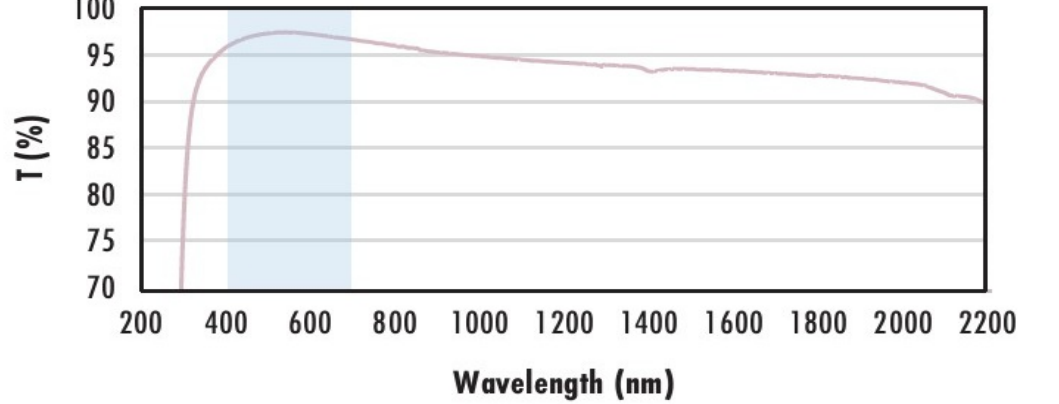
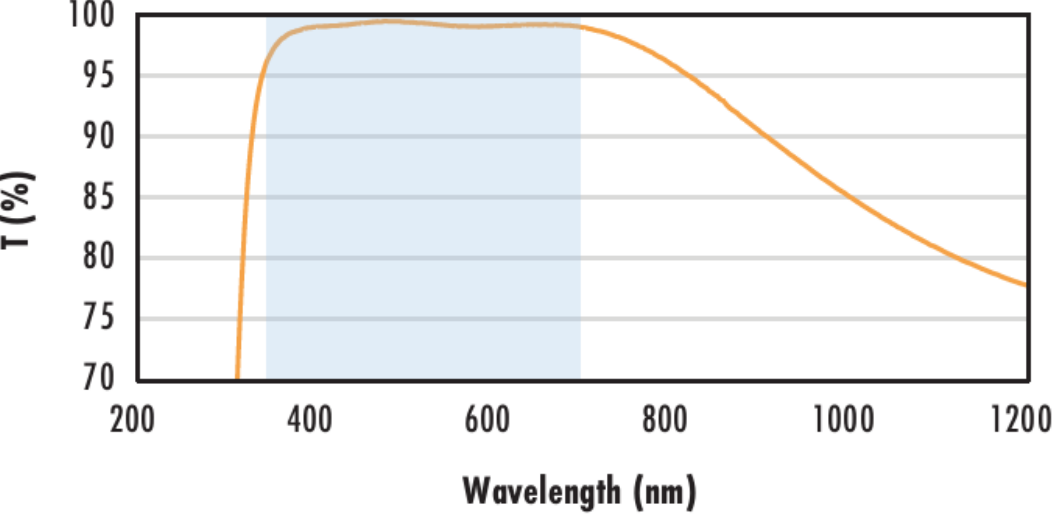
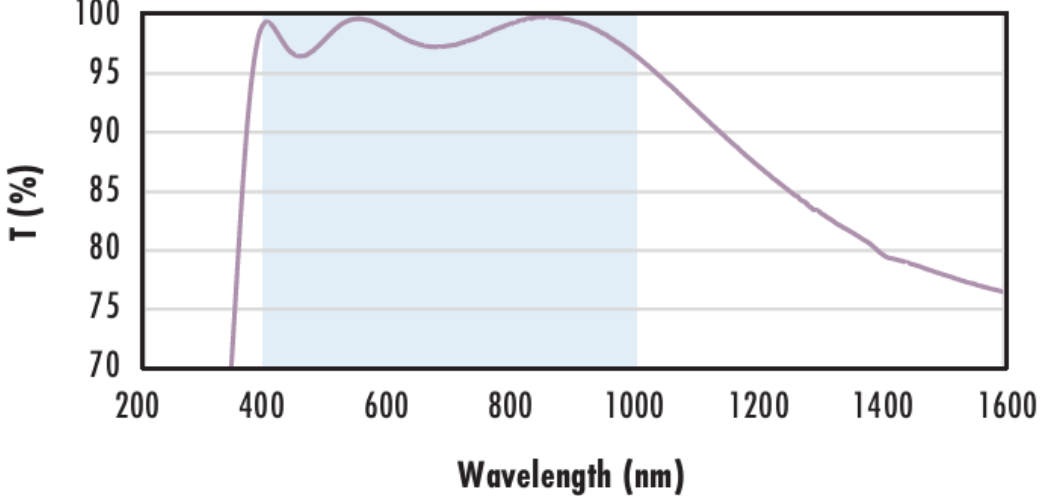
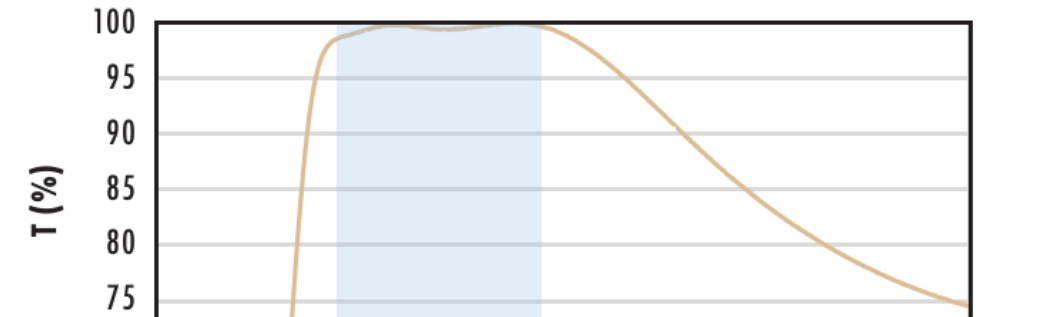
## PRODUCT DETAILS

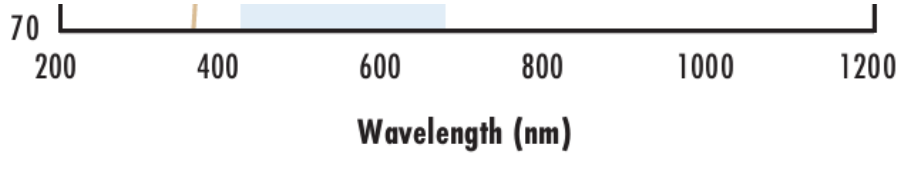
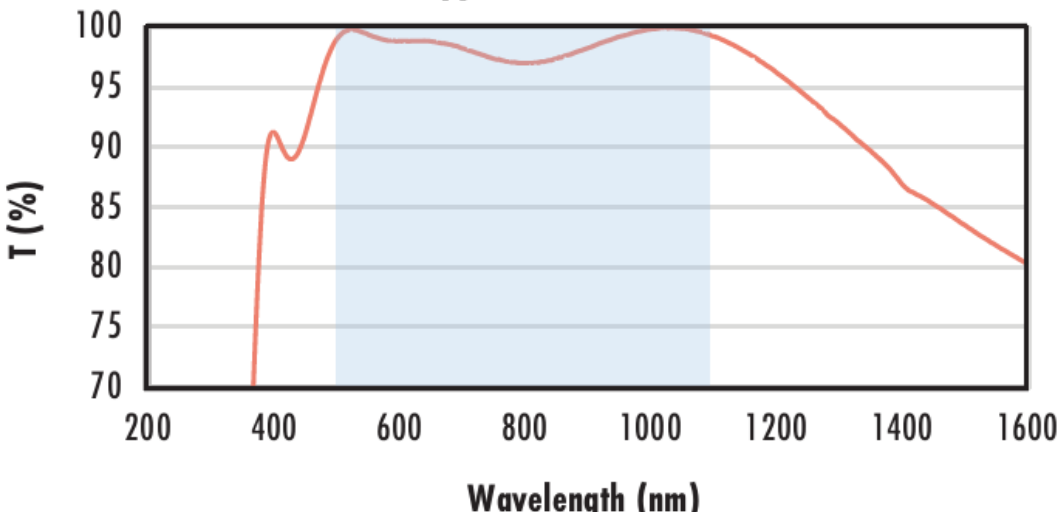
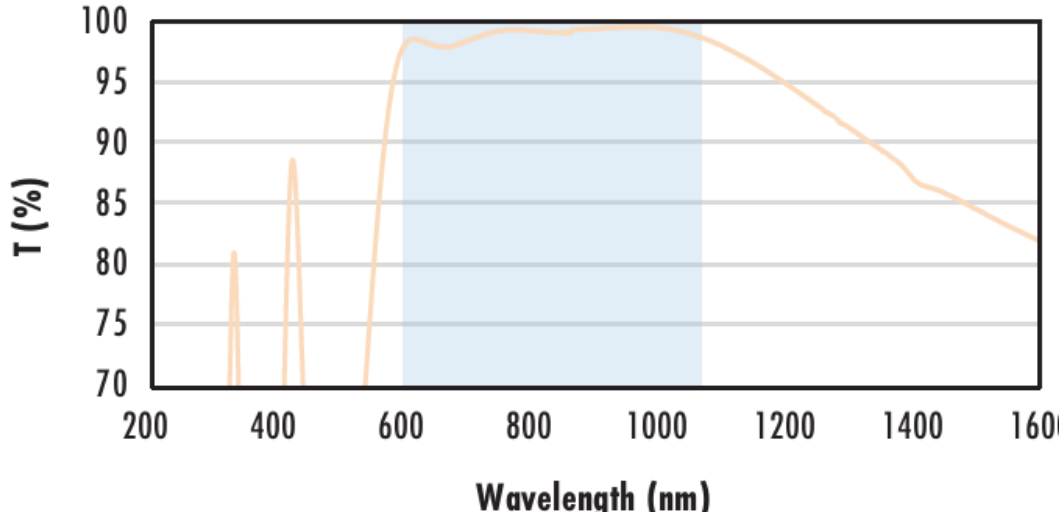
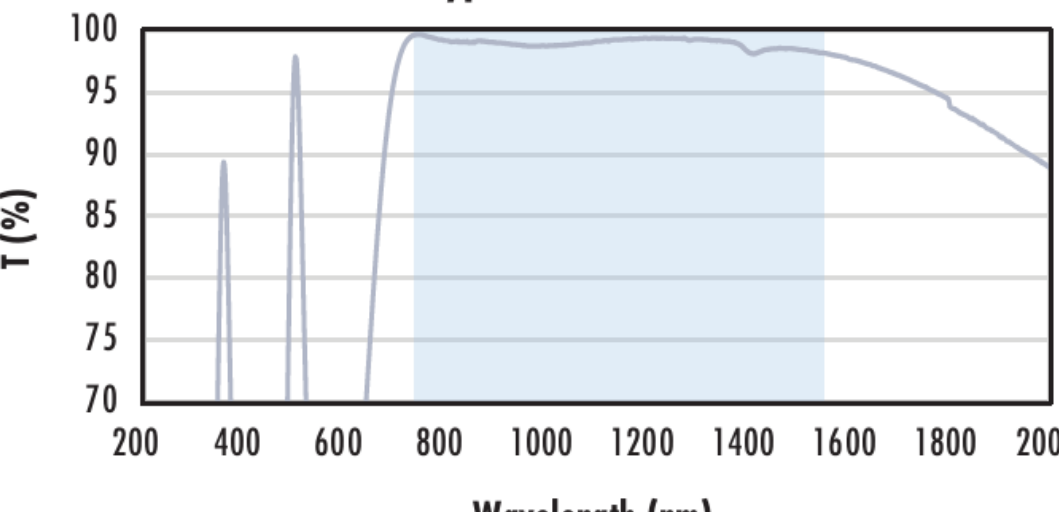
- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- Minimize Aberrations Including Spherical and Coma
- UV Fused Silica DCX Lenses Available
- Other Coating Options Available: Uncoated, MgF<sub>2</sub>, VIS 0°, NIR I, NIR II, VIS-NIR, and YAG-BBAR

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

<div data-bbox="262 112 1251 638"><h3>Uncoated N-BK7 Typical Transmission</h3></div>	<p>Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.</p> <p><a href="#">Click Here to Download Data</a></p>
<div data-bbox="262 706 1251 1193"><h3>N-BK7 with MgF<sub>2</sub> Coating Typical Transmission</h3></div>	<p>Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) 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 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</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 data-bbox="262 1228 1251 1819"><h3>N-BK7 with VIS-EXT Coating Typical Transmission</h3></div>	<p>Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) 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\% @ 350 - 700\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 data-bbox="262 1869 1251 2442"><h3>N-BK7 with VIS-NIR Coating Typical Transmission</h3></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> <math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math> <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 data-bbox="262 2478 1251 2884"><h3>N-BK7 with VIS 0° Coating Typical Transmission</h3></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>

	
<p data-bbox="569 261 1037 365"><b>N-BK7 with YAG-BBAR Coating</b> <b>Typical Transmission</b></p> 	<p data-bbox="1339 394 1839 448">Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p data-bbox="1339 460 1850 513">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1472 522 1709 596"><p><math>R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}</math></p><p><math>R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}</math></p><p><math>R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}</math></p></div> <p data-bbox="1339 605 1839 658">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 670 1709 694"><a href="#">Click Here to Download Data</a></p>
<p data-bbox="617 893 1010 997"><b>N-BK7 with NIR I Coating</b> <b>Typical Transmission</b></p> 	<p data-bbox="1339 1056 1839 1110">Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p data-bbox="1339 1121 1850 1175">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1472 1184 1709 1207"><p><math>R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}</math></p></div> <p data-bbox="1339 1219 1839 1273">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1285 1709 1308"><a href="#">Click Here to Download Data</a></p>
<p data-bbox="606 1537 1020 1641"><b>N-BK7 with NIR II Coating</b> <b>Typical Transmission</b></p> 	<p data-bbox="1339 1665 1839 1718">Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p data-bbox="1339 1730 1850 1783">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1472 1792 1709 1866"><p><math>R_{abs} \leq 1.5\% \text{ @ } 750 - 800\text{nm}</math></p><p><math>R_{abs} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}</math></p><p><math>R_{avg} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}</math></p></div> <p data-bbox="1339 1902 1839 1955">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1472 1967 1709 1991"><a href="#">Click Here to Download Data</a></p>

COMPATIBLE MOUNTS