

TECHSPEC[®] 12mm Dia. x 12mm FL, VIS 0° Coated, Double-Convex Lens



Stock **#47-358** 20+ In Stock

☐ [Other Coating Options](#)

-

1

+

£39^{.80}

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Volume Pricing	
Qty 1-9	£39.80 each
Qty 10-24	£35.80 each
Qty 25-99	£31.80 each
Need More?	Request Quote

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 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Double-Convex Lens

Type:

Physical & Mechanical Properties

12.00 +0.0/-0.025	Diameter (mm):
<1	Centering (arcmin):
Protective as needed	Bevel:
3.85	Center Thickness CT (mm):
±0.05	Center Thickness Tolerance (mm):
1.41	Edge Thickness ET (mm):
11.00	Clear Aperture CA (mm):
Optical Properties	
10.79	Back Focal Length BFL (mm):
12.00	Effective Focal Length EFL (mm):
VIS 0° (425-675nm)	Coating:
R _{avg} ≤0.4% @ 425 - 675nm	Coating Specification:
N-SF5	Substrate: ☐
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
15.34	Radius R ₁ =R ₂ (mm):
1.00	f#:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
0.50	Numerical Aperture NA:
425 - 675	Wavelength Range (nm):
5 J/cm² @ 532nm, 10ns	Damage Threshold, By Design: ☐
Regulatory Compliance	
Compliant	RoHS 2015:
Compliant	Reach 219:
View	Certificate of Conformance:

Need different specs or modifications?

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](#).

Product Details

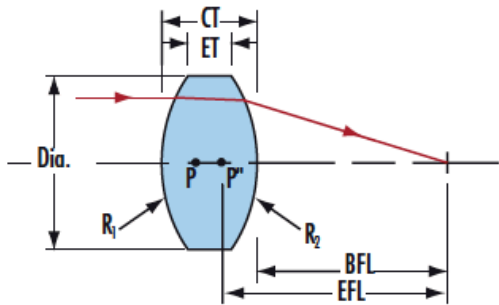
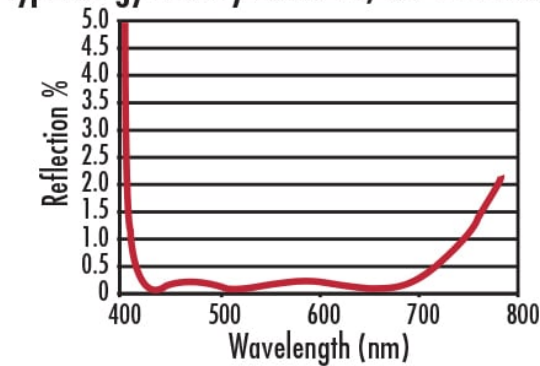
- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Minimize Aberrations Including Spherical and Coma
- [UV Fused Silica DCX Lenses](#) Available
- Other Coating Options Available: [Uncoated](#), [MgF₂](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), [VIS-NIR](#), and [YAG-BBAR](#)

TECHSPEC® VIS 0° 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

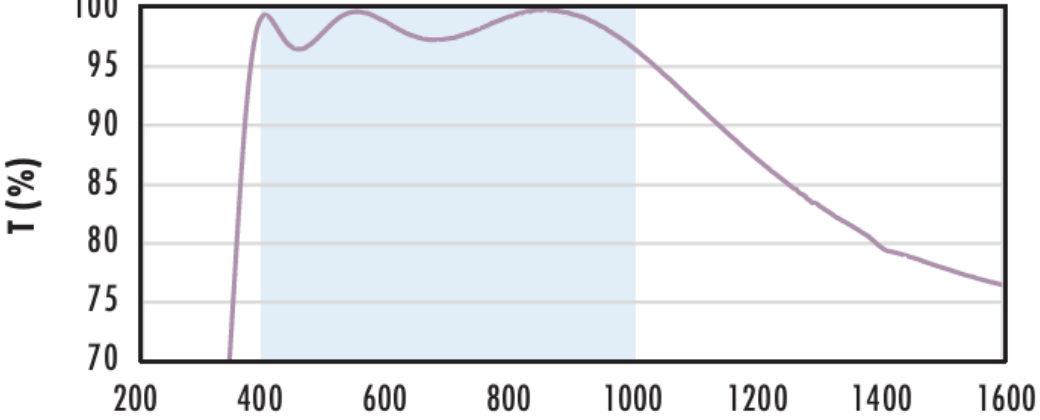
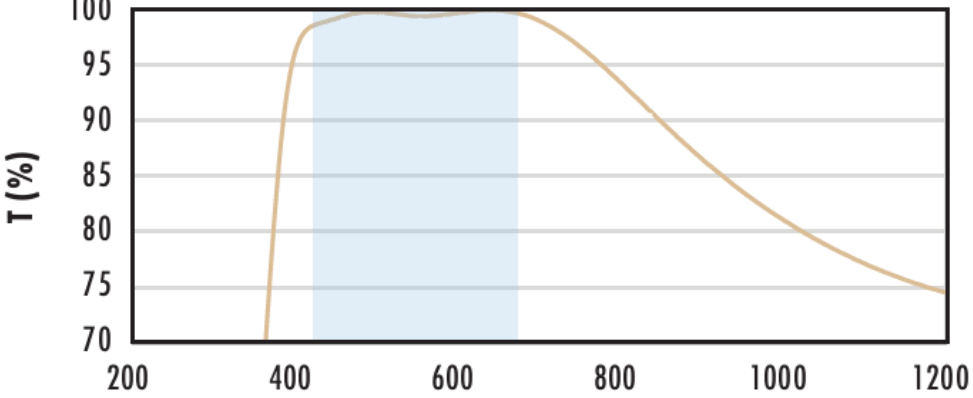
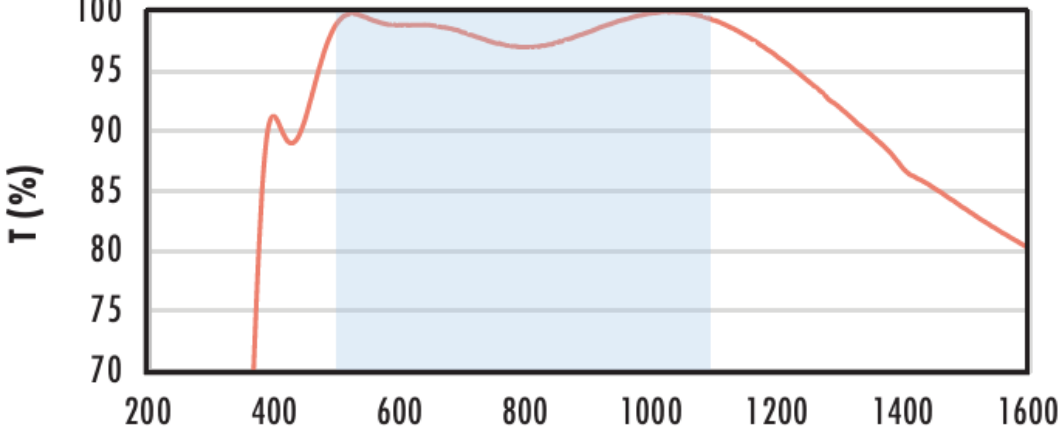
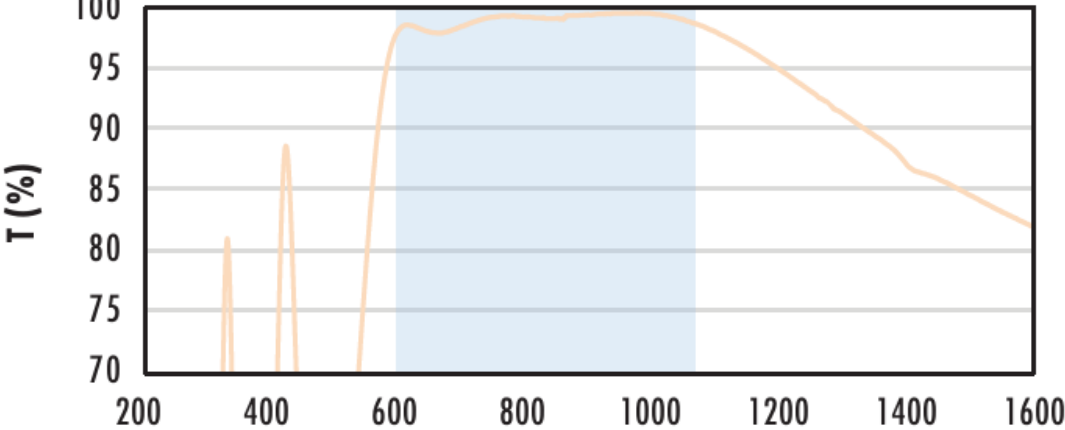
applications with a conjugate ratio (ratio between object distance and image distance) between 0.2 and 5. At a conjugate ratio of 1, aberrations such as spherical aberration, chromatic aberration, coma, and distortion are minimized or cancelled due to the symmetric lens design. TECHSPEC® VIS 0° Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

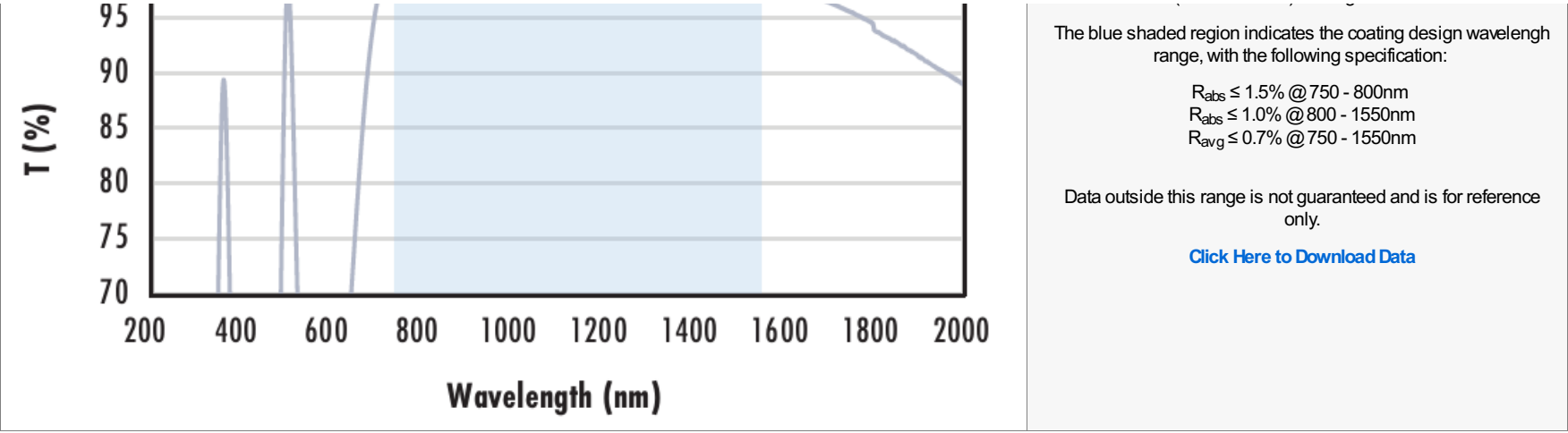
Technical Information

VIS 0° Coating
R_{avg} ≤0.4% @ 425 - 675nm
Typ. Energy Density Limit: 5 J/cm² @ 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 MgF₂ Coating Typical Transmission	Typical transmission of a 3mm thick N-BK7 window with MgF₂ (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. Click Here to Download Data

20040060080010001200 Wavelength (nm)		
N-BK7 with VIS-NIR Coating Typical Transmission 100 95 90 85 80 75 70  2004006008001000120014001600 Wavelength (nm)		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_{\text{abs}} \leq 0.25\% \text{ @ } 880\text{nm}$$R_{\text{avg}} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$R_{\text{avg}} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
N-BK7 with VIS 0° Coating Typical Transmission 100 95 90 85 80 75 70  20040060080010001200 Wavelength (nm)		Typical transmission of a 3mm thick N-BK7 window with VIS 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. Click Here to Download Data
N-BK7 with YAG-BBAR Coating Typical Transmission 100 95 90 85 80 75 70  2004006008001000120014001600 Wavelength (nm)		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\% \text{ @ } 532\text{nm}$$R_{\text{abs}} \leq 0.25\% \text{ @ } 1064\text{nm}$$R_{\text{avg}} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
N-BK7 with NIR I Coating Typical Transmission 100 95 90 85 80 75 70  2004006008001000120014001600 Wavelength (nm)		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. Click Here to Download Data
N-BK7 with NIR II Coating Typical Transmission 100  2004006008001000120014001600 Wavelength (nm)		Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.



Coating Curves

Compatible Mounts