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TECHSPEC[®] 12.0mm Dia. x -48 FL, YAG-BBAR, Plano-Concave Lens



Stock #21-314 2 In Stock

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1

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MRP ₹4,226

Price inclusive of all taxes

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Volume Pricing	
Qty 1-9	₹4,226 each
Qty 10-25	₹3,789 each
Qty 26-49	₹3,376 each
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Product Downloads

General

Type:

Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):

12.00

Protective as needed	Bevel:
Center Thickness CT (mm): 3.50 ±0.05	
Centering (arcmin): <1	
Clear Aperture CA (mm): 11.00	
Edge Thickness ET (mm): 4.12	
Optical Properties	
Effective Focal Length EFL (mm): -48.00	
Substrate: ☐ N-BK7	
f##: 1.00	
Numerical Aperture NA: 0.13	
Coating: YAG-BBAR (500-1100nm)	
Wavelength Range (nm): 500 - 1100	
Back Focal Length BFL (mm): -50.31	
Coating Specification: R _{abs} <0.25% @ 532nm R _{abs} <0.25% @ 1064nm R _{avg} <1.0% @ 500 - 1100nm	
Focal Length Specification Wavelength (nm): 587.6	
Focal Length Tolerance (%): ±1	
Radius R ₁ (mm): -24.81	
Surface Quality: 40-20	
Damage Threshold, By Design: ☐ 5 J/cm ² @ 532nm, 10ns	
Power (P-V) @ 632.8nm: 1.5λ	
Irregularity (P-V) @ 632.8nm: λ/4	

Regulatory Compliance	
RoHS 2015: Compliant	
Certificate of Conformance: View	
Reach 235: Compliant	
Country of Origin: Japan	
Imported By: Edmund Optics India Private Limited 267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038 Phone: +91- 80-6845 0000	

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

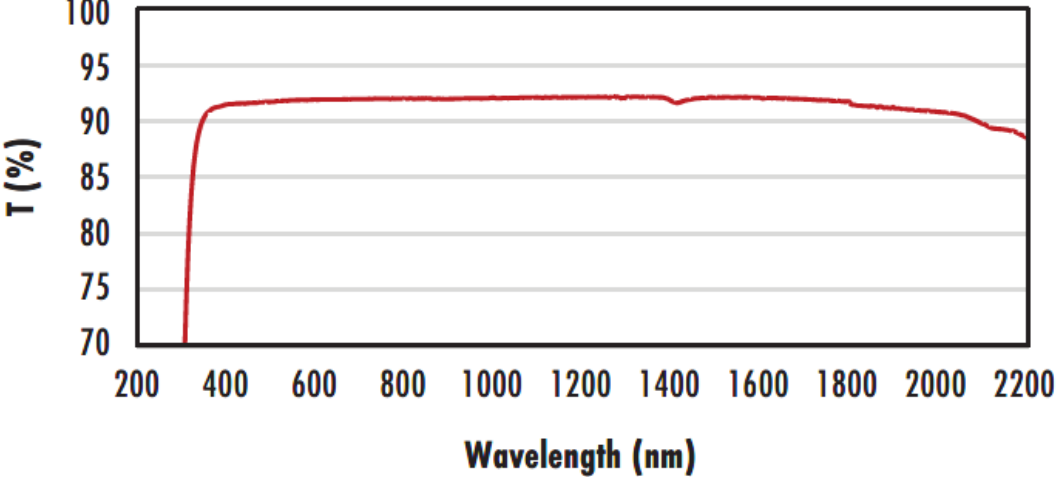
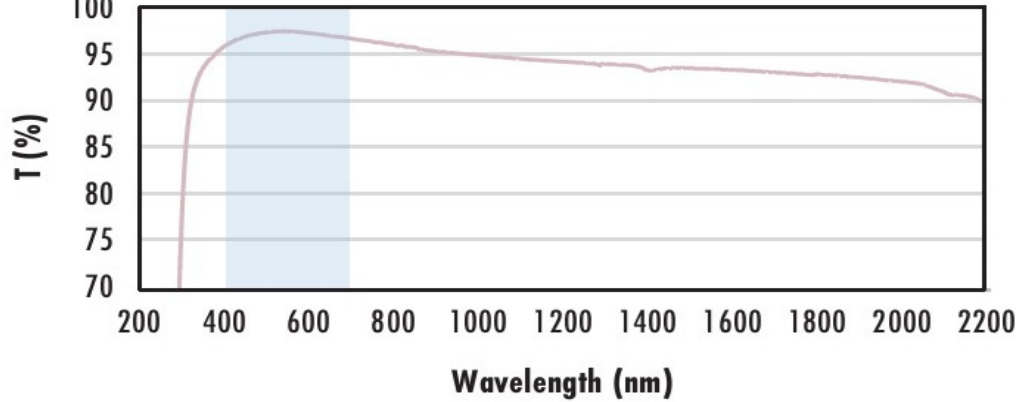
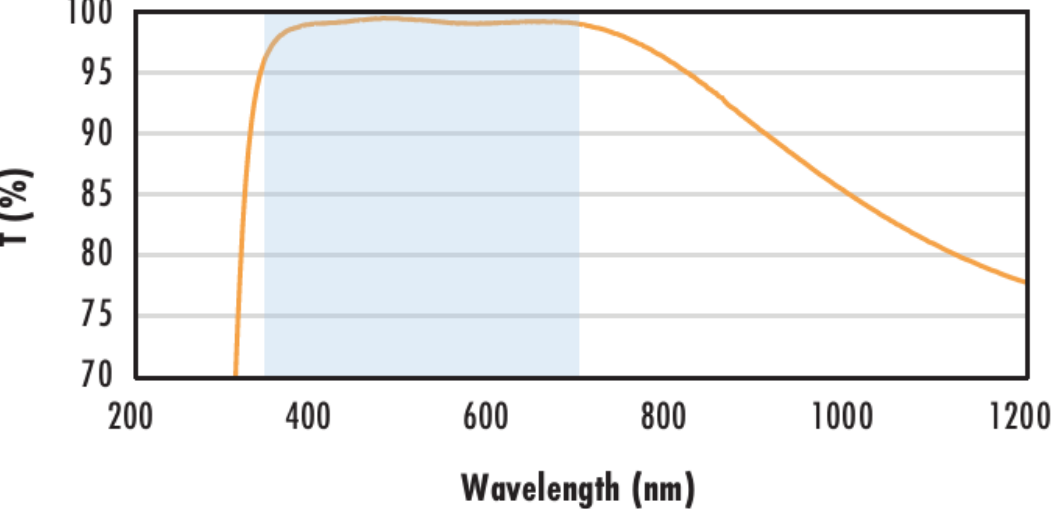
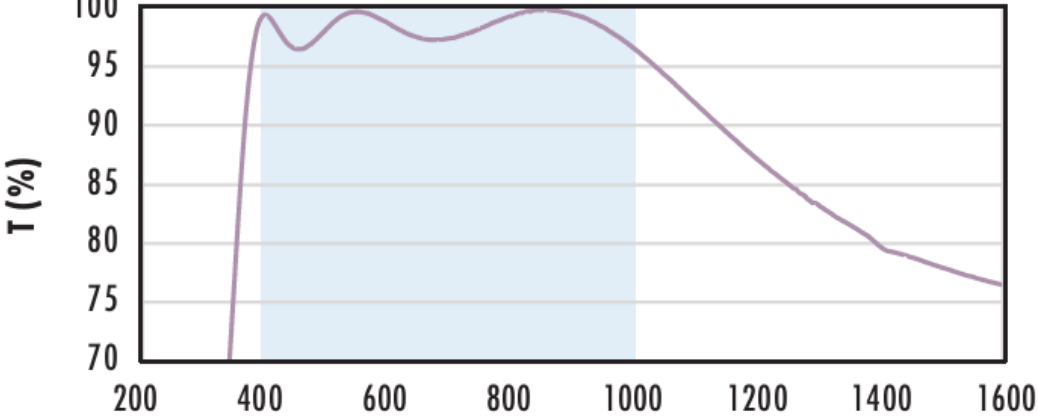
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Optimized for R<0.25% at both 532nm and 1064nm
- AR Coated to Provide <1.0% Reflectance per Surface for 500 - 1100nm
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [1064nm V-Coat](#)

TECHSPEC® YAG-BBAR Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC® YAG-BBAR Coated Plano-Concave (PCV) Lenses feature less than 0.25% reflection at common Nd:YAG laser wavelengths of 532nm and 1064nm. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), or with [NIR II](#) AR coating options.

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 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: $R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}$ 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: $R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
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: $R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$ $R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

