

[See all 280 Products in Family](#)

TECHSPEC®

12.5mm Dia. x 45mm FL, VIS-NIR Coated, Achromatic Lens



Stock **#49-327** 15 In Stock

☐ [Other Coating Options](#)

-

1

+

£77^{.20}

ADD TO CART

Volume Pricing	
Qty 1-5	£77.20 each
Qty 6-25	£61.60 each
Qty 26-49	£58.00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Achromatic Lens

Type:

Physical & Mechanical Properties

12.50 +0.0/-0.025	Diameter (mm):
11.50	Clear Aperture CA (mm):
<1	Centering (arcmin):
5.00 ±0.10	Center Thickness CT (mm):
3.50 ±0.05	Center Thickness CT 1 (mm):
1.50 ±0.05	Center Thickness CT 2 (mm):
3.94	Edge Thickness ET (mm):
Protective as needed	Bevel:

Optical Properties

45.00	Effective Focal Length EFL (mm):
±1	Focal Length Tolerance (%):
42.52	Back Focal Length BFL (mm):
587.6	Focal Length Specification Wavelength (nm):
26.82	Radius R ₁ (mm):
-20.12	Radius R ₂ (mm):
-61.38	Radius R ₃ (mm):
N-BK7 / N-SF5	Substrate: ☐
40-20	Surface Quality:
3.6	f/#:
0.14	Numerical Aperture NA:
VIS-NIR (400-1000nm)	Coating:
R _{abs} ≤0.25% @ 880nm R _{avg} ≤1.25% @ 400 - 870nm R _{avg} ≤1.25% @ 890 - 1000nm	Coating Specification:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
400 - 1000	Wavelength Range (nm):

Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	REACH 241:

Custom

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

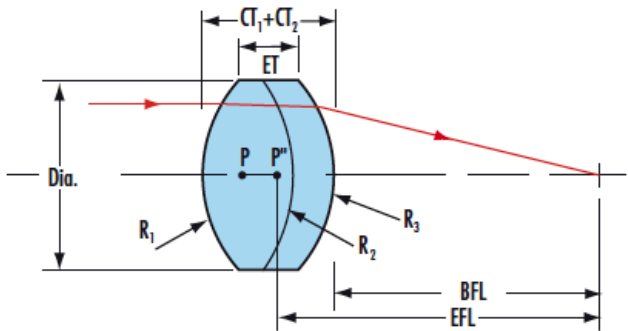
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- Designed for 0° Angle of Incidence
- Less Than 0.25% Reflectance Per Surface @880nm
- **MgF₂** and **VIS 0°** Coated Achromats Also Available

TECHSPEC® VIS-NIR Coated Achromatic Lenses consist of two optical components cemented together to form an achromatic doublet. The doublet is computer optimized to correct for on-axis spherical and chromatic aberrations. TECHSPEC® VIS-NIR Coated Achromatic Lenses have visible/near-infrared broadband anti-reflection coating, which is specially optimized to yield maximum transmission (>99%) in the near-infrared. The achromatic lenses reduce reflection to less than 0.25 percent per surface at 880nm. **Magnesium Fluoride** coated and **VIS 0°** coated achromats are also available.

Technical Information



Coating Curves

Compatible Mounts