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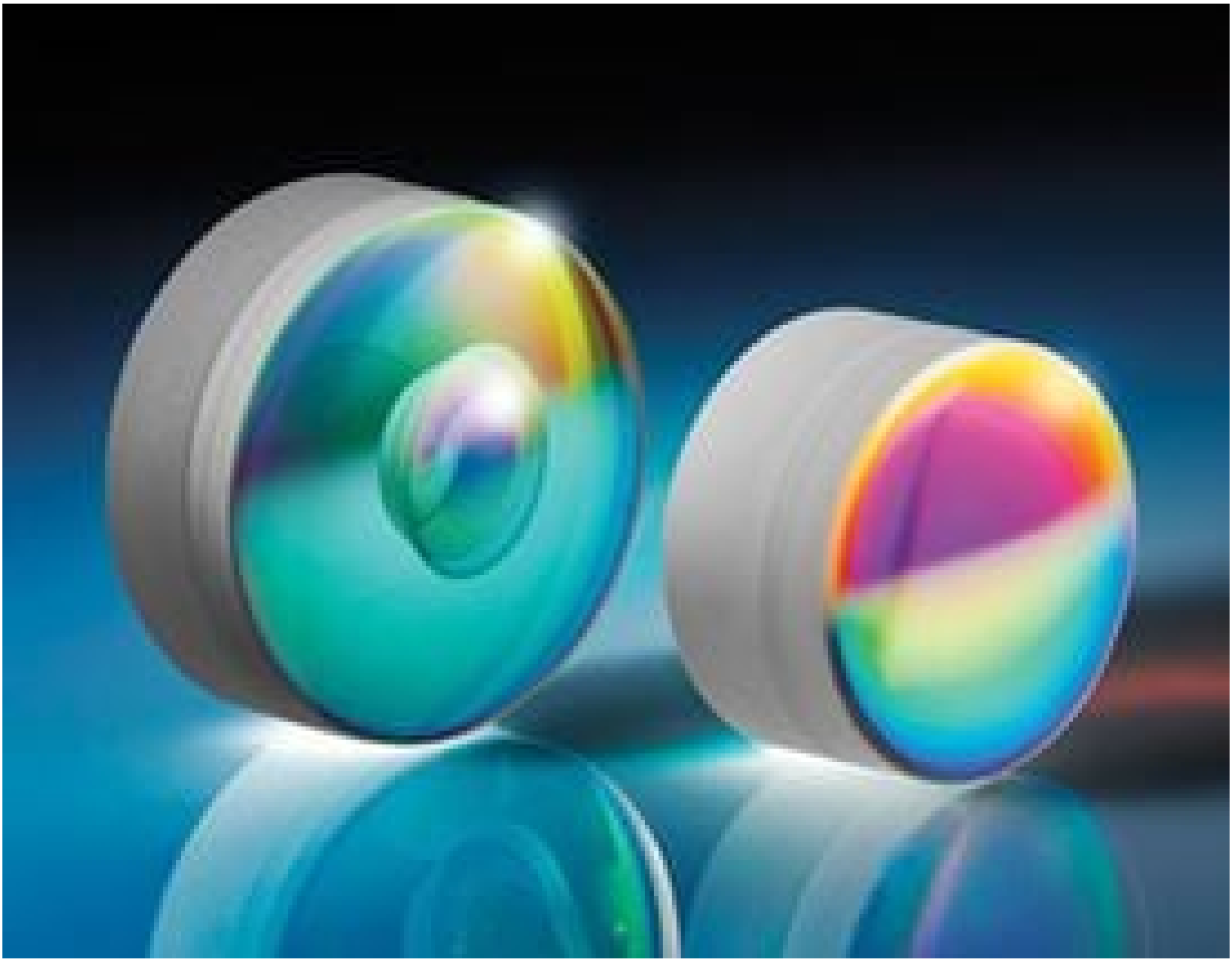
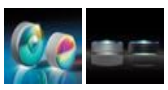
TECHSPEC® 50mm Dia. x 100mm FL, NIR II Coated, Achromatic Lens





Stock **#47-317** **20+ In Stock**

- 1 + **MRP** ₹30,267

Price inclusive of all taxes

ADD TO CART

Volume Pricing	
Qty 1-5	**₹30,267** each
Qty 6-25	**₹24,214** each
Qty 26-49	**₹22,701** each
Need More?	Request Quote

Product Downloads

General

Type:

Achromatic Lens

Physical & Mechanical Properties

Diameter (mm):

50.00 +0.0/-0.025

Clear Aperture CA (mm):
49.00

Centering (arcmin):
<1

Center Thickness CT (mm):
20.00 ±0.20

Center Thickness CT 1 (mm):
14.50 ±0.10

Center Thickness CT 2 (mm):
5.50 ±0.10

Edge Thickness ET (mm):
13.89

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
100.00

Focal Length Tolerance (%):
±1

Back Focal Length BFL (mm):
87.86

Focal Length Specification Wavelength (nm):
880.00

Radius R_1 (mm):
59.74

Radius R_2 (mm):
-59.74

Radius R_3 (mm):
-494.70

Substrate:
N-LAK22 / N-SF6

Surface Quality:
40-20

f/#:
2.00

Numerical Aperture NA:
0.25

Coating:
NIR II (750-1550nm)

Coating Specification:
R_{abs} ≤1.5% @ 750 - 800nm
R_{abs} ≤1.0% @ 800 - 1550nm
R_{avg} ≤0.7% @ 750 - 1550nm

Power (P-V) @ 632.8nm:
1.5λ

Irregularity (P-V) @ 632.8nm:
λ/4

Wavelength Range (nm):
750 - 1550

Regulatory Compliance

RoHS 2015:
Compliant

Reach 224:
Compliant

Certificate of Conformance:
View

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

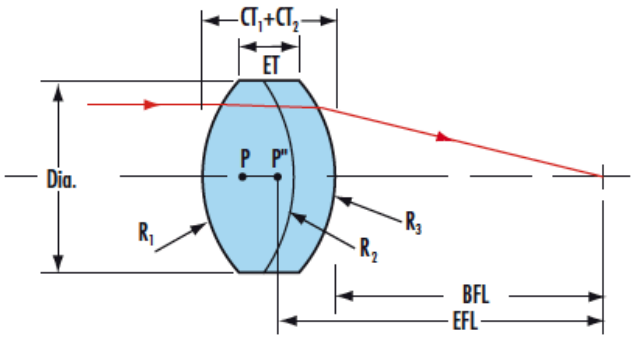
Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**

Product Details

- Designed to Give Increased Resolution and Smaller Spot Sizes for NIR Wavelengths (750-1100nm)
- Decreased Spherical Aberration for Monochromatic Sources Out to 2µm
- Broadband AR Coating has <1% Reflectivity Between 750–1550nm

TECHSPEC® Near-IR (NIR) Achromatic Lenses are designed to provide the smallest spot size possible for polychromatic light between 750 and 1100nm. By utilizing our NIR doublets instead of standard doublets designed for the visible, the RMS spot diameter can be reduced from 43µm to 22.5µm, for example, when using polychromatic light. Spot size will be smaller when focusing on monochromatic sources. TECHSPEC Near-IR (NIR) Achromatic Lenses also reduce spherical aberration and perform superior when used with a monochromatic source up to 2µm in wavelength. Typical applications for these doublets include imaging lenses for the near infrared, focusing and expanding of NIR lasers, and focusing/collimating lenses for fiber optics and NIR LEDs.

Technical Information



Compatible Mounts

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