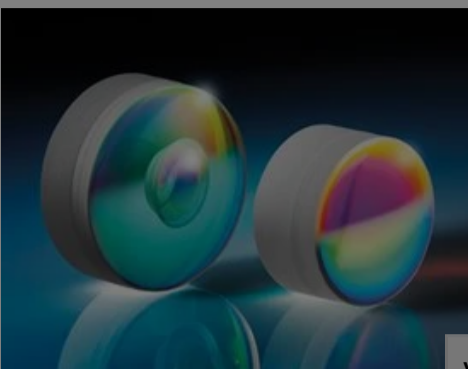


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/ [Near-IR \(NIR\) Achromatic Lens](#)

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TECHSPEC® 6mm Diameter

Achromatic Lens



Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

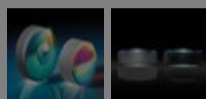
Select Your Country/Region: European Union

Submit

1

€113⁰⁰

ADD TO CART



Volume Pricing	
Qty 1-5	€113,00 each
Qty 6-25	€90,00 each
Qty 26-49	€84,50 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:stp
- Curve:pdf
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Spec Sheets:pdf
- Curve (xlsx):xlsx
- Zemax:zar
- Zemax:zmx
- eDrawing:easm
- Code V:seq
- EO Spec Sheet
- [Download All](#)

General

Type: Achromatic Lens

Physical & Mechanical Properties

Diameter (mm):	6.00 +0.0/-0.025	Clear Aperture CA (mm):	5.4
Centering (arcmin):	<1	Center Thickness CT (mm):	4.20 ±0.10
Center Thickness CT 1 (mm):	3.00 ±0.05	Center Thickness CT 2 (mm):	1.20 ±0.05
Edge Thickness ET (mm):	3.61	Bevel:	Protective as needed

Optical Properties

Effective Focal Length EFL (mm):	15.00	Focal Length Tolerance (%):	±1
Back Focal Length BFL (mm):	12.42	Focal Length Specification Wavelength (nm):	880.00
Radius R₁ (mm):	8.80	Radius R₂ (mm):	-7.93
Radius R₃ (mm):	-71.17	Substrate:	N-LAK22 / N-SF6
Surface Quality:	40-20	f/#:	2.5
Numerical Aperture NA:	0.20	Coating:	NIR II (750-1550nm)

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

Power (P-V) @ 632.8nm: 1.5λ

Irregularity (P-V) @ 632.8nm: $\lambda/4$

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Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

Reach 240: **Compliant**

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 $2\mu\text{m}$
- 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 $43\mu\text{m}$ to $22.5\mu\text{m}$, 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 $2\mu\text{m}$ 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

Related Products



#13-800 - Small Lens Clamp for 4-8mm Dia. Optics
€172,00

Qty



Frequently Purchased Together



#31-854 - 9.0mm Dia. x 18.0mm FL,
MgF₂ Coated, Plano-Convex Lens
€38,25

Qty



#3

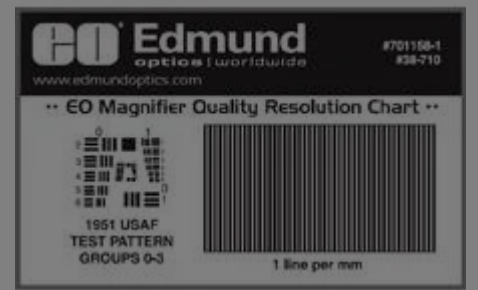
€30,50

Qty



€29,50

Qty



#38-710 - USAF Resolution Target
Pocket Size
€9,75

Qty

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Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	6.0mm Optic Dia., Optic Mount	Fixed		#64-552	€32,75 Request Quote	2 In Stock <input type="text" value="1"/>
	25mm Cage 6mm Diameter Lens Mount	Fixed		#85-554	€45,75 Request Quote	1 In Stock <input type="text" value="1"/>

Check out our full selection of mounts [here](#).

Resources

Media Type

- Application Note
- Glossary
- Scientific Paper
- Video
- FAQ

APPLICATION NOTE

Anti-Reflection

APPLICATION NOTE

Ap

APPLICATION NOTE

Lens Geometry
Performance
Comparison

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GLOSSARY

NIR (Near
Infrared)

GLOSSARY

VIS/NIR
Coating

APPLICATION NOTE

The Correct
Material for
Infrared (IR)
Applications

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