

**TECHSPEC® 12.5mm Dia. x 20mm FL, MgF<sub>2</sub> Coated, Achromatic Doublet Lens**



MgF<sub>2</sub> Coated Achromatic Lenses



Stock **#32-309** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ **\$\$120<sup>00</sup>**

**ADD TO CART**

Volume Pricing	
Qty 1-5	<b>\$\$120.40</b> each
Qty 6-25	<b>\$\$95.90</b> each
Qty 26-49	<b>\$\$91.00</b> each
Need More?	<a href="#">Request Quote</a>

Product Downloads

**SPECIFICATIONS**

**General**

Achromatic Lens

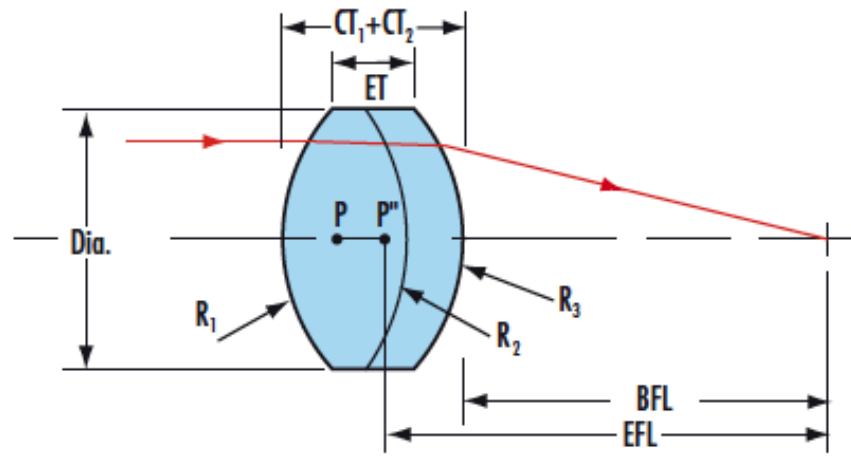
Type:

**Physical & Mechanical Properties**Diameter (mm):  
12.50 +0.0/-0.025Clear Aperture CA (mm):  
11.50Centering (arcmin):  
<1Center Thickness CT (mm):  
6.35 ±0.10Center Thickness CT 1 (mm):  
5.25 ±0.05Center Thickness CT 2 (mm):  
1.10 ±0.05Edge Thickness ET (mm):  
4.62Bevel:  
Protective as needed**Optical Properties**Effective Focal Length EFL (mm):  
20.00Focal Length Tolerance (%):  
±1Back Focal Length BFL (mm):  
16.45Focal Length Specification Wavelength (nm):  
587.6Radius R<sub>1</sub> (mm):  
13.98Radius R<sub>2</sub> (mm):  
-9.35Radius R<sub>3</sub> (mm):  
-76.14Substrate:   
[S-BAH11 / N-SF10](#)Surface Quality:  
40-20f#:  
1.6Numerical Aperture NA:  
0.31Coating:  
MgF<sub>2</sub> (400-700nm)Coating Specification:  
R<sub>avg</sub> ≤1.75% @ 400 - 700nmPower (P-V) @ 632.8nm:  
1.5λIrregularity (P-V) @ 632.8nm:  
λ/4Wavelength Range (nm):  
400 - 700**Regulatory Compliance**RoHS 2015:  
[Compliant](#)Certificate of Conformance:  
[View](#)Reach 247:  
[Compliant](#)**PRODUCT DETAILS**

- Designed for 0° Angle of Incidence
- Less Than 1.75% Reflectance Per Surface @ 400 - 700nm
- [VIS 0°](#) and [VIS-NIR](#) Coated Achromats Also Available

TECHSPEC® MgF<sub>2</sub> Coated Achromatic Lenses consist of two optical components cemented together to form an achromatic doublet which is computer optimized to correct for on-axis spherical and chromatic aberrations. These lenses feature a single layer of MgF<sub>2</sub> which provides less than 1.75% reflectivity from 400 – 700nm. TECHSPEC MgF<sub>2</sub> Coated Achromatic Lenses are best for applications involving multi-color (white light) imaging due to their specific doublet lens pairing that enables them to correct the color separation inherent in glass. Having eliminated the problematic chromatic aberrations, achromatic doublet lenses become the most cost-efficient means for polychromatic illumination and imaging.

## TECHNICAL INFORMATION



## COATING CURVES

### 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](#).

## COMPATIBLE MOUNTS