

TECHSPEC<sup>®</sup> 12.5mm Dia x -50mm FL Negative Doublet Lens MgF<sub>2</sub> Coated



Stock **#45-220** 20+ In Stock

[Other Coating Options](#)

-

1

+

S\$129<sup>.50</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | S\$129.50 each                |
| Qty 6-25       | S\$103.60 each                |
| Qty 26-49      | S\$97.30 each                 |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

| General                          |                         |
|----------------------------------|-------------------------|
| Negative Achromatic Lens         | Type:                   |
| Physical & Mechanical Properties |                         |
| 12.50 +0.0/-0.025                | Diameter (mm):          |
| 11.50                            | Clear Aperture CA (mm): |

|                      |                             |
|----------------------|-----------------------------|
| <1                   | Centering (arcmin):         |
| 3.56 ±0.10           | Center Thickness CT (mm):   |
| 2.00 ±0.05           | Center Thickness CT 1 (mm): |
| 1.56 ±0.05           | Center Thickness CT 2 (mm): |
| 4.40                 | Edge Thickness ET (mm):     |
| Protective as needed | Bevel:                      |

|                                      |                                             |
|--------------------------------------|---------------------------------------------|
| Optical Properties                   |                                             |
| -50.00                               | Effective Focal Length EFL (mm):            |
| ±1                                   | Focal Length Tolerance (%):                 |
| -51.58                               | Back Focal Length BFL (mm):                 |
| 587.6                                | Focal Length Specification Wavelength (nm): |
| -30.83                               | Radius R <sub>1</sub> (mm):                 |
| 23.47                                | Radius R <sub>2</sub> (mm):                 |
| 69.20                                | Radius R <sub>3</sub> (mm):                 |
| N-BK7 / N-SF5                        | Substrate: <input type="checkbox"/>         |
| 40-20                                | Surface Quality:                            |
| 4.00                                 | f/#:                                        |
| 0.13                                 | Numerical Aperture NA:                      |
| MgF <sub>2</sub> (400-700nm)         | Coating:                                    |
| R <sub>avg</sub> ≤1.75% @400 - 700nm | Coating Specification:                      |
| 1.5λ                                 | Power (P-V) @ 632.8nm:                      |
| λ/4                                  | Irregularity (P-V) @ 632.8nm:               |
| 400 - 700                            | Wavelength Range (nm):                      |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| Compliant             | Reach 219:                  |
| View                  | Certificate of Conformance: |

## Product Details

- Magnesium Fluoride (MgF<sub>2</sub>) Coating
  - Used to Extend Focal Length
  - [Broadband AR Coated Negative Achromatic Lenses](#) Also Available
- TECHSPEC® MgF<sub>2</sub> Coated Negative Achromatic Lenses consist of two optical elements cemented together. Negative doublet lenses are corrected for color and on-axis aberrations. TECHSPEC MgF<sub>2</sub> Coated Negative Achromatic Lenses are used predominantly as Barlow lenses to extend focal lengths. These lenses are often combined with positive achromatic mirror systems and imaging lenses.

## 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