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TECHSPEC<sup>®</sup> 12.7mm Dia. x 50.8mm FL, VIS 0° Coated, Achromatic Lens



Stock **#49-777** 20+ In Stock

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-

1

+

S\$128<sup>.10</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | S\$128.10 each                |
| Qty 6-25       | S\$102.20 each                |
| Qty 26-49      | S\$95.90 each                 |
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Product Downloads

General

Achromatic Lens

Type:

Physical & Mechanical Properties

12.70 +0.0/-0.025

Diameter (mm):

|                      |                             |
|----------------------|-----------------------------|
| 11.70                | Clear Aperture CA (mm):     |
| <1                   | Centering (arcmin):         |
| 4.00 ±0.20           | Center Thickness CT (mm):   |
| 2.50 ±0.10           | Center Thickness CT 1 (mm): |
| 1.50 ±0.10           | Center Thickness CT 2 (mm): |
| 3.16                 | Edge Thickness ET (mm):     |
| Protective as needed | Bevel:                      |

|                                      |                                             |
|--------------------------------------|---------------------------------------------|
| Optical Properties                   |                                             |
| 50.80                                | Effective Focal Length EFL (mm):            |
| ±1                                   | Focal Length Tolerance (%):                 |
| 48.86                                | Back Focal Length BFL (mm):                 |
| 587.6                                | Focal Length Specification Wavelength (nm): |
| 33.17                                | Radius R <sub>1</sub> (mm):                 |
| -23.98                               | Radius R <sub>2</sub> (mm):                 |
| -89.03                               | Radius R <sub>3</sub> (mm):                 |
| N-BAK1 / N-SF15                      | Substrate: □                                |
| 40-20                                | Surface Quality:                            |
| 4.00                                 | f/#:                                        |
| 0.13                                 | Numerical Aperture NA:                      |
| VIS 0° (425-675nm)                   | Coating:                                    |
| R <sub>avg</sub> ≤0.4% @ 425 - 675nm | Coating Specification:                      |
| 1.5λ                                 | Power (P-V) @ 632.8nm:                      |
| λ/4                                  | Irregularity (P-V) @ 632.8nm:               |
| 425 - 675                            | Wavelength Range (nm):                      |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | Reach 181:                  |
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |

## Product Details

- Designed for 0° Angle of Incidence
  - Less Than 0.4% Reflectance Per Surface from 425 - 675nm
  - MgF<sub>2</sub> and VIS-NIR Coated Achromats Also Available
- TECHSPEC® VIS 0° 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. 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. TECHSPEC® VIS 0° Coated Achromatic Lenses provide optimized transmission for 425 – 675nm, reducing average reflection to 0.4%. MgF<sub>2</sub> and VIS-NIR Coated Achromats are also available on our website.

## 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

