

**TECHSPEC® 50mm Dia., 0.50 Numerical Aperture Uncoated, Aspheric Lens**



Stock **#66-316** **7 In Stock**

[Other Coating Options](#)

€549<sup>00</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €549,00 each                  |
| Qty 6-25       | €495,00 each                  |
| Qty 26-49      | €460,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

**!** Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Aspheric Lens **Type:**

**Physical & Mechanical Properties**

50.00 +0.0/-0.1 **Diameter (mm):**

|                      |                                  |
|----------------------|----------------------------------|
| ≤5                   | <b>Centering (arcmin):</b>       |
| 45                   | <b>Clear Aperture CA (mm):</b>   |
| 8.01                 | <b>Edge Thickness ET (mm):</b>   |
| 19.40 ±0.1           | <b>Center Thickness CT (mm):</b> |
| Protective as needed | <b>Bevel:</b>                    |
| Convex               | <b>Shape of Back Surface:</b>    |

## Optical Properties

|                         |  |
|-------------------------|--|
| 50.00 @587.6nm          | <b>Effective Focal Length EFL (mm):</b>            |
| 0.50                    | <b>Numerical Aperture NA:</b>                      |
| 38.33                   | <b>Back Focal Length BFL (mm):</b>                 |
| <a href="#">L-BAL35</a> | <b>Substrate:</b> <input type="checkbox"/>         |
| 587.6                   | <b>Aspheric Design Wavelength (nm):</b>            |
| 1.2λ                    | <b>Asphere Figure Error, RMS @ 632.8nm:</b>        |
| Uncoated                | <b>Coating:</b>                                    |
| 60-40                   | <b>Surface Quality:</b>                            |
| 1.00                    | <b>f#:</b>   |
| 61.15                   | <b>Abbe Number (v<sub>d</sub>):</b>                |
| 1.589                   | <b>Index of Refraction (n<sub>d</sub>):</b>        |
| 500                     | <b>Radius R<sub>2</sub> (mm):</b>                  |
| 330 - 2400              | <b>Wavelength Range (nm):</b>                      |
| Infinite                | <b>Conjugate Distance:</b>                         |
| 587.6                   | <b>Focal Length Specification Wavelength (nm):</b> |
| 20.00                   | <b>Power (diopters):</b>                           |

## Material Properties

|     |   |
|-----|---|
| 6.6 | <b>Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):</b> |
|-----|---|

## Regulatory Compliance

|                           |                                    |
|---------------------------|------------------------------------|
| <a href="#">Compliant</a> | <b>RoHS 2015:</b>                  |
| <a href="#">Compliant</a> | <b>Reach 219:</b>                  |
| <a href="#">View</a>      | <b>Certificate of Conformance:</b> |

### 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

- Diameters from 10 to 200mm
- Focal Lengths from 7.5 to 300mm
- Broadband AR Coatings Available

TECHSPEC® Aspheric Lenses are designed to focus light while eliminating spherical aberration from divergent light sources in applications including focusing the output of a laser diode. [Aspheric lenses can increase the numerical aperture of a lens while minimizing system aberrations.](#) Aspheric lenses may also reduce the number of elements needed in a multi-element system. Aspheric lenses can reduce overall system weight while providing advantages such as increasing throughput or simplifying assembly.

TECHSPEC Aspheric Lenses feature low  $f/\#$ 's for optimum light gathering performance. Prescription data is available to easily integrate these aspheric lenses into an optical system. These lenses have also been computer optimized to eliminate spherical aberration while minimizing higher order aberrations. VS coating option provides less than 1.5% reflection from 425 – 675nm. NIR coating option provides less than 1.5% reflection from 600 – 1050nm. Contact our sales department for volume pricing or for help specifying a custom aspheric lens.

## Technical Information



## Compatible Mounts