

TECHSPEC® 50mm Dia., 0.83 Numerical Aperture Uncoated, Aspheric Lens



Stock **#67-248** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ S\$1,118⁶⁰

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Volume Pricing	
Qty 1-5	S\$1,118.60 each
Qty 6-25	S\$1,008.00 each
Qty 26-49	S\$938.00 each
Need More?	Request Quote

Product Downloads

General

Aspheric Lens **Type:**

Physical & Mechanical Properties

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

≤5 **Centering (arcmin):**

45	Clear Aperture CA (mm):
1.44	Edge Thickness ET (mm):
20.00 ±0.1	Center Thickness CT (mm):
Protective as needed	Bevel:
Plano	Shape of Back Surface:

Optical Properties

30.00 @ 587.6nm	Effective Focal Length EFL (mm):
0.83	Numerical Aperture NA:
18.04	Back Focal Length BFL (mm):
N-SF5	Substrate: <input type="checkbox"/>
587.6	Aspheric Design Wavelength (nm):
1.2λ	Asphere Figure Error, RMS @ 632.8nm:
Uncoated	Coating:
60-40	Surface Quality:
0.6	f#:
32.25	Abbe Number (v_d):
1.673	Index of Refraction (n_d):
380 - 2500	Wavelength Range (nm):
Infinite	Conjugate Distance:
587.6	Focal Length Specification Wavelength (nm):
33.33	Power (diopters):

Material Properties

7.9	Coefficient of Thermal Expansion CTE (10⁻⁶/°C):
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Regulatory Compliance

Compliant	RoHS 2015:
Compliant	Reach 219:
View	Certificate of Conformance:

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. VIS 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

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