

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



TECHSPEC® Precision Aspheric Lenses

Stock **#37-438** **14 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ **A\$1,278⁴⁰**

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Volume Pricing	
Qty 1-5	A\$1,278.40 each
Qty 6-10	A\$1,150.40 each
Qty 11-25	A\$1,048.00 each
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Product Downloads

General

Aspheric Lens **Type:**

Physical & Mechanical Properties

50.00 +0.00/-0.025 **Diameter (mm):**

Centering (arcmin):

<3

45.00 **Clear Aperture CA (mm):**

7.35 **Edge Thickness ET (mm):**

21.56 ±0.10 **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:**

18.06 **Back Focal Length BFL (mm):**

[N-SF6](#) **Substrate:**

587.6 **Aspheric Design Wavelength (nm):**

0.4λ **Asphere Figure Error, RMS @ 632.8nm:**

Uncoated **Coating:**

40-20 **Surface Quality:**

0.60 **f#:**

25.36 **Abbe Number (v_d):**

1.805 **Index of Refraction (n_d):**

390 - 2500 **Wavelength Range (nm):**

Infinite **Conjugate Distance:**

587.6 **Focal Length Specification Wavelength (nm):**

33.33 **Power (diopters):**

Material Properties

9.0 **Coefficient of Thermal Expansion CTE (10⁻⁶/°C):**

Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **Reach 233:**

Product Details

- Improved Versions of Our Aspheric Lenses
- Precision Grade Aspheric Surfaces
- High Numerical Apertures to Maximize Throughput

TECHSPEC® Precision Aspheric Lenses are CNC polished aspheric lenses that feature a 0.4λ RMS aspheric figure error. The precision aspheric figure error makes these lenses ideal for applications that require spherical aberration correction, including imaging and laser focusing applications. These aspheric lenses can also be used to replace multiple spherical elements in optical assemblies to reduce weight and cost. TECHSPEC Precision Aspheric Lenses are available with diameters from 6 to 50mm and high numerical apertures to maximize light throughput.

Compatible Mounts