

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



Stock #67-248 3-5 DAYS

[Other Coating Options](#)

⊖ 1 ⊕ A\$1,176<sup>00</sup>

**ADD TO CART**

Qty 1-5

A\$1,176.00

Qty 6+

A\$944.00

Volume Pricing

[Request Quote](#)

Product Downloads



### SPECIFICATIONS

#### General

Type:  
Aspheric Lens

## Physical & Mechanical Properties

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

**Centering (arcmin):**  
≤5

**Clear Aperture CA (mm):**  
45

**Edge Thickness ET (mm):**  
1.44

**Center Thickness CT (mm):**  
20.00 ±0.1

**Bevel:**  
Protective bevel as needed

**Shape of Back Surface:**  
Plano

## Optical Properties

**Effective Focal Length EFL (mm):**  
30.00 @587.6nm

**Numerical Aperture NA:**  
0.83

**Back Focal Length BFL (mm):**  
18.04

**Substrate:**   
[N-SF5](#)

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

**Asphere Figure Error, RMS @ 632.8nm:**  
1.2λ

**Coating:**  
Uncoated

**Surface Quality:**  
60-40

**f#:**  
0.6

**Wavelength Range (nm):**  
380 - 2500

**Conjugate Distance:**  
Infinite

**Power (diopters):**  
33.33

## Regulatory Compliance

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

**Reach 219:**  
[Compliant](#)

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

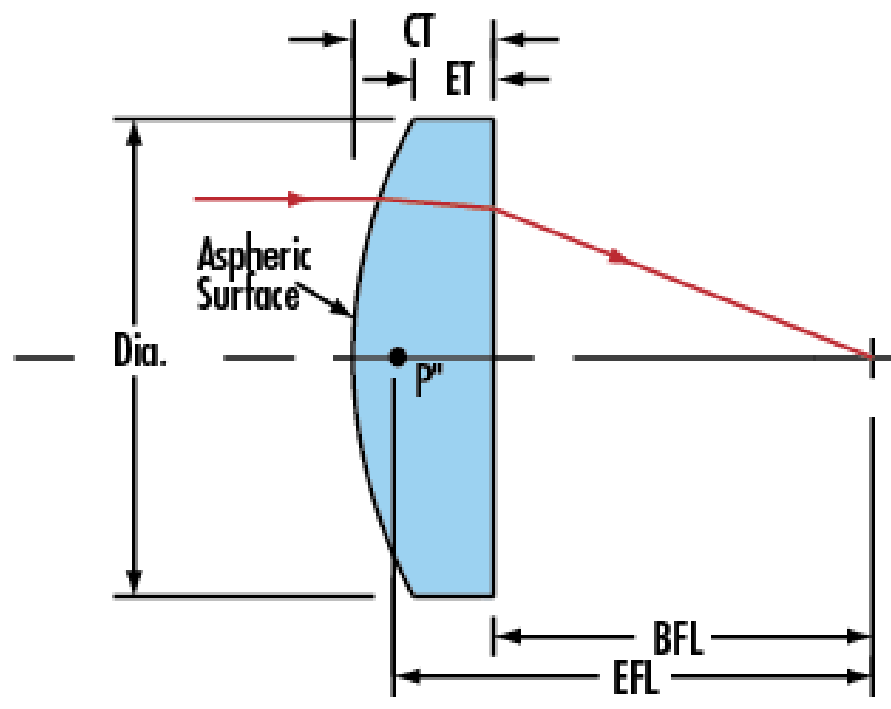
## PRODUCT DETAILS

- 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

---