

TECHSPEC<sup>®</sup>

50.8mm Dia x 101.6mm FL, 1064nm V-Coat, High Precision Laser Grade Aspheric Lens



High Precision Laser Grade Aspheric Lenses

Stock **#39-567** **3 In Stock**

☐ [Other Coating Options](#)

-

1

+

€1.250<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €1.250,00 each                |
| Qty 6-10       | €1.125,00 each                |
| Need More?     | <a href="#">Request Quote</a> |

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Aspheric Lens

Type:

Strehl Ratio is >0.8 by design and tested

Note:

Physical & Mechanical Properties

|                      |                           |
|----------------------|---------------------------|
| 50.80 +0.00/-0.05    | Diameter (mm):            |
| <1                   | Centering (arcmin):       |
| 46.80                | Clear Aperture CA (mm):   |
| 2.69                 | Edge Thickness ET (mm):   |
| 10.00                | Center Thickness CT (mm): |
| Protective as needed | Bevel:                    |
| Plano                | Shape of Back Surface:    |

Optical Properties

|                                             |                                     |
|---------------------------------------------|-------------------------------------|
| 101.60 @ 1064nm                             | Effective Focal Length EFL (mm):    |
| 0.25                                        | Numerical Aperture NA:              |
| 94.70                                       | Back Focal Length BFL (mm):         |
| <a href="#">Fused Silica</a> (Corning 7980) | Substrate: <input type="checkbox"/> |

|               |                                      |
|---------------|--------------------------------------|
| 1064          | Aspheric Design Wavelength (nm):     |
| $\lambda$ /40 | Asphere Figure Error, RMS @ 632.8nm: |

|                                  |                        |
|----------------------------------|------------------------|
| Laser V-Coat (1064nm)            | Coating:               |
| R <sub>abs</sub> <0.25% @ 1064nm | Coating Specification: |

|      |                  |
|------|------------------|
| 10-5 | Surface Quality: |
| 2    | f/#:             |

|                               |                     |
|-------------------------------|---------------------|
| See Technical Information Tab | Spot Size (μm):     |
| Infinite                      | Conjugate Distance: |

|                                           |                                                       |
|-------------------------------------------|-------------------------------------------------------|
| 15 J/cm <sup>2</sup> @ 1064nm, 20ns, 20Hz | Damage Threshold, By Design: <input type="checkbox"/> |
| 9.84                                      | Power (diopters):                                     |

Material Properties

|              |               |
|--------------|---------------|
| >0.8, tested | Strehl Ratio: |
|--------------|---------------|

Regulatory Compliance

|                      |                             |
|----------------------|-----------------------------|
| <a href="#">View</a> | Certificate of Conformance: |
|----------------------|-----------------------------|

## 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

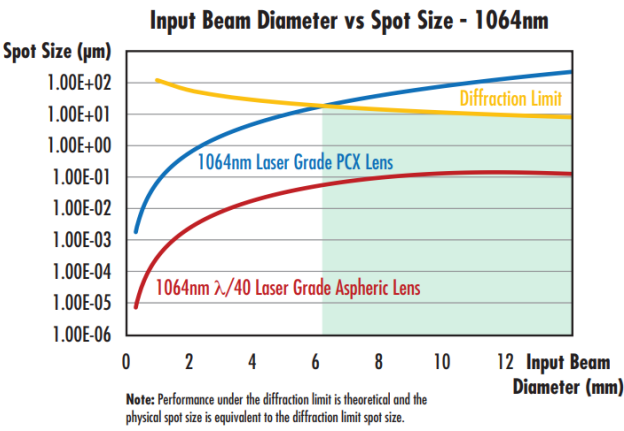
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- Substrate Shape and Coating Optimized for Nd:YAG Laser Wavelengths
- High Precision Aspheric Surface
- Strehl Ratio > 0.8

TECHSPEC® High Precision Laser Grade Aspheric Lenses are polished through precision magnetorheological finishing (MRF), providing them with an ultra-smooth aspheric surface with an aspheric surface tolerance of  $\lambda$ /40 RMS. The aberration free aspheric surfaces produced through this super-polishing process result in these aspheric lenses having diffraction-limited performance at their design wavelengths. A high-performance Laser Line V-Coat minimizes reflection when these aspheric lenses are used at their Nd:YAG wavelengths. TECHSPEC High Precision Laser Grade Aspheric Lenses feature substrates designed and shaped at their laser wavelength to optimize the entire lens design, not just the anti-reflection coating, for the laser wavelength. Standard imperial sizes of these laser grade aspheres with f/2 designs, made from fused silica, are available.

## Technical Information



## Compatible Mounts