

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** **7 In Stock**

☐ [Other Coating Options](#)

-

1

+

S\$1,750<sup>.00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | S\$1,750.00 each              |
| Qty 6-10       | S\$1,575.00 each              |
| Need More?     | <a href="#">Request Quote</a> |

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

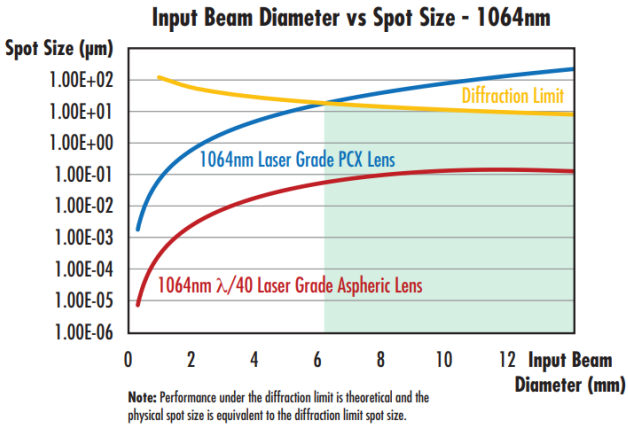
Diameter (mm):

|                                           |                                      |
|-------------------------------------------|--------------------------------------|
| <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):          |
| Fused Silica (Corning 7980)               | Substrate: □                         |
| 1064                                      | Aspheric Design Wavelength (nm):     |
| λ/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: □       |
| 9.84                                      | Power (diopters):                    |
| Material Properties                       |                                      |
| >0.8, tested                              | Strehl Ratio:                        |
| Regulatory Compliance                     |                                      |
| View                                      | Certificate of Conformance:          |

## 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 λ/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



## 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](#).

## Compatible Mounts