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# TECHSPEC® 25mm Dia. x 50mm EFL, 1064nm V-Coat, Sapphire Aspheric Lens

Sapphire Aspheric Lenses

Stock **#27-222** **4 In Stock**

- 1 + **₹2,42,892**

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| Volume Pricing | |
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| Qty 1-5 | **₹2,42,892** each |
| Qty 6-25 | **₹2,06,692** each |
| Qty 26-49 | **₹1,82,558** each |
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Product Downloads

## Physical & Mechanical Properties

**Diameter (mm):**
25.00 +0/-0.1

**Centering (arcmin):**
3

**Clear Aperture CA (mm):**
22.5

**Center Thickness CT (mm):**
4.10 ±0.10

**Bevel:**
0.5 x 45°

**Surface Roughness (□):**
40

**Poisson's Ratio:**
0.27

**Young's Modulus (GPa):**
435

## Optical Properties

**Effective Focal Length EFL (mm):**
50.00

**Numerical Aperture NA:**
0.25

**Back Focal Length BFL (mm):**
47.66

**Substrate: □**
Sapphire ($Al_2O_3$)

**Coating:**
1064nm V-Coat

**Coating Specification:**
$R_{abs}$ < 0.25% @ 1064nm @ 0° AOI

**Surface Quality:**
40-20

**f/#:**
2

**Irregularity (P-V) @ 632.8nm:**
0.5λ

**Coating Aperture (mm):**
22.5

**Power (P-V) @ 632.8nm:**
1λ

## Material Properties

**Density (g/cm$^3$):**
3.97

## Regulatory Compliance

**RoHS 2015:**
Compliant

**Certificate of Conformance:**
View

**Reach 235:**
Compliant

**Country of Origin:**
United States

**Imported By:**
Edmund Optics India Private Limited

# Product Details

- Durable Sapphire Substrates Ideal For Material Processing and Advanced Manufacturing
- Uncoated and 1064nm Laser Line V-Coated Versions Available
- Diffraction Limited Performance at 1064nm

Sapphire Aspheric Lenses are designed for precision performance in high power applications. Utilizing durable sapphire substrates, these lenses decrease contamination effects on laser performance and feature better thermal conductivity, lower thermally induced focal shift, and faster induced focal shift rise time than fused silica. Designed with material processing and advanced manufacturing in mind, their aspheric surfaces provide diffraction limited performance at 1064nm. Sapphire Aspheric lenses are available uncoated, with a standard laser v-coat, or with custom coatings **available** upon request.

**Note:** Exercise caution when using Sapphire Aspheric Lenses in ultrafast laser applications as sapphire can cause non-linear effects.

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