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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 + **A$4,304**.00

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Volume Pricing	
Qty 1-5	**A$4,304.00** each
Qty 6-10	**A$3,664.00** each
Qty 11+	**A$3,440.00** 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

Design Wavelength DWL (nm):
1064

Index of Refraction (n_d):
1.77

Irregularity (P-V) @ 632.8nm:
0.5λ

Coating Aperture (mm):
22.5

Power (P-V) @ 632.8nm:
1λ

Material Properties

Coefficient of Thermal Expansion CTE (10^{-6}/°C):
8.8

Density (g/cm^3):
3.97

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 235:
Compliant

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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