

**TECHSPEC® 25mm Dia x 50mm FL 3-5µm AR Coated, Si Aspheric Lens**



Stock **#89-618 8 In Stock**

[Other Coating Options](#)

€805.<sup>00</sup>

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Volume Pricing	
Qty 1-5	€805,00 each
Qty 6+	€645,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Aspheric Lens **Type:**

**Physical & Mechanical Properties**

25.00 +0.00/-0.10 **Diameter (mm):**

≤10 **Centering (arcmin):**

<21.8	<b>Centering, ETD (<math>\mu\text{m}</math>):</b>
22.5	<b>Clear Aperture CA (mm):</b>
2.3	<b>Edge Thickness ET (mm):</b>
3.00 $\pm$ 0.10	<b>Center Thickness CT (mm):</b>
Protective as needed	<b>Bevel:</b>
Diamond Turned	<b>Edges:</b>
Concave	<b>Shape of Back Surface:</b>

## Optical Properties

50.00 @4000nm	<b>Effective Focal Length EFL (mm):</b>
0.25	<b>Numerical Aperture NA:</b>
47.78	<b>Back Focal Length BFL (mm):</b>
Silicon (Si)	<b>Substrate:</b> <input type="checkbox"/>
4000	<b>Aspheric Design Wavelength (nm):</b>
$\lambda/6$	<b>Asphere Figure Error, RMS @ 632.8nm:</b>
BBAR (3000-5000nm)	<b>Coating:</b>
$R_{\text{avg}} < 3\%$ @ 3 - 5 $\mu\text{m}$	<b>Coating Specification:</b>
<0.3	<b>Surface Accuracy, P-V (<math>\mu\text{m}</math>):</b>
60-40	<b>Surface Quality:</b>
2.00	<b>f#:</b>
3.422 @ 5 $\mu\text{m}$	<b>Index of Refraction (<math>n_d</math>):</b>
75.698	<b>Radius <math>R_2</math> (mm):</b>
3000 - 5000	<b>Wavelength Range (nm):</b>
Infinite	<b>Conjugate Distance:</b>
4000	<b>Focal Length Specification Wavelength (nm):</b>

## Material Properties

2.55	<b>Coefficient of Thermal Expansion CTE (<math>10^{-6}/^\circ\text{C}</math>):</b>
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## Regulatory Compliance

<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>
<a href="#">Compliant</a>	<b>REACH 241:</b>

## Product Details

- Diffraction-Limited Performance
- Low Density and Dispersion
- Ideal for Weight Sensitive IR Applications
- Available with BBAR (1650-3000nm) or Mid-Wave Infrared (3000-5000nm) AR Coatings

TECHSPEC® Silicon Aspheric Lenses are high performance, lightweight solutions for BBAR and Mid-Wave Infrared (MMIR) applications and are ideal alternatives for costly ZnSe lenses and brittle Germanium lenses. These lenses are available with efficient broadband AR coatings for the BBAR (1650-3000nm) or MMIR (3000-5000nm) spectral regions. TECHSPEC Silicon Aspheric Lenses feature the mechanical and thermal properties required to withstand many of the effects of harsh environments including fluctuations in temperature and pressure. Because silicon is a low density material, these lenses are also ideal for weight-sensitive systems, such as those found in many defense applications.

## Compatible Mounts

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