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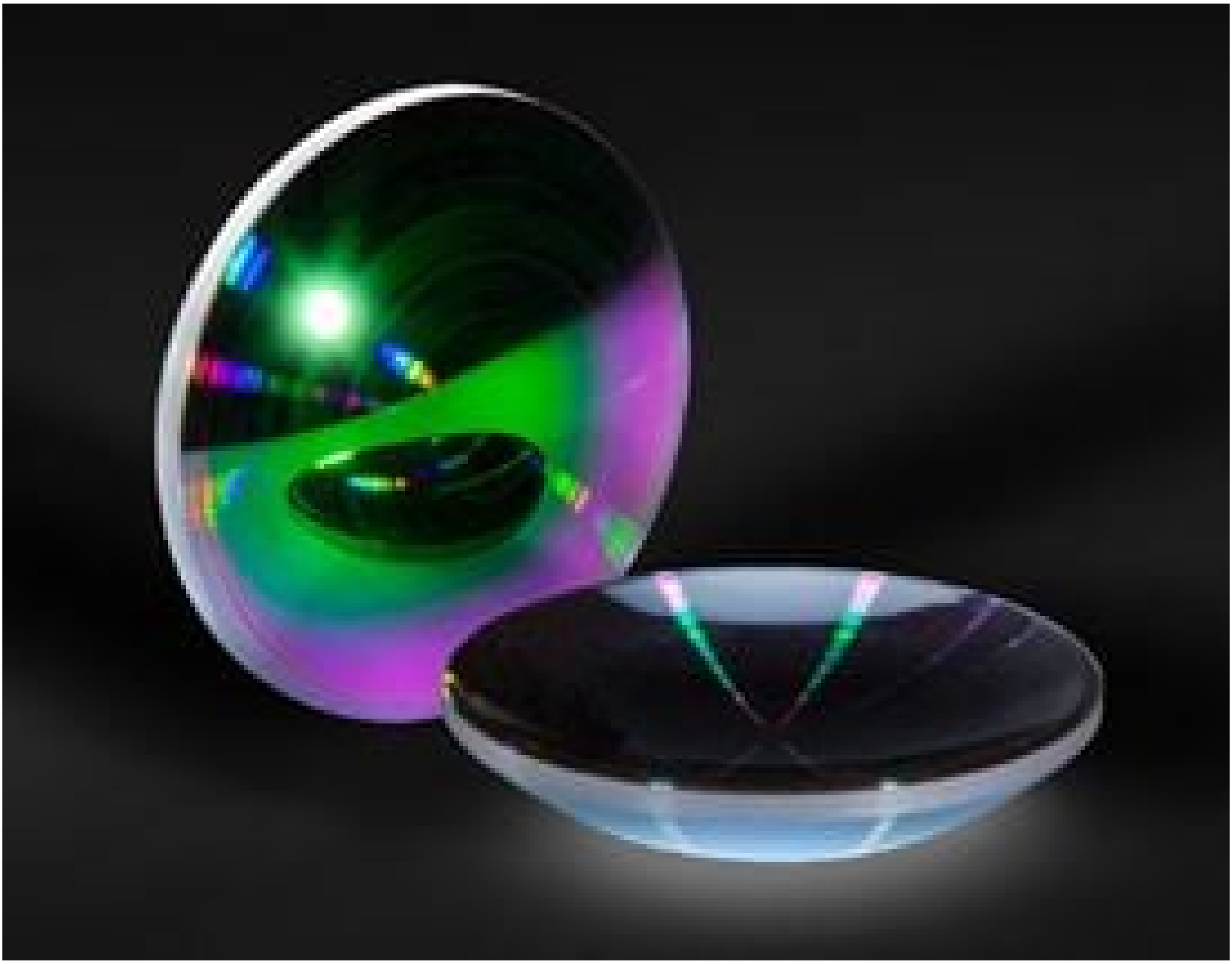
TECHSPEC® 25mm Dia x 50mm FL 3-5µm AR Coated, Si Aspheric Lens



Stock **#89-618** CONTACT US

Other Coating Options

- 1 + S$1,127.00

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Volume Pricing	
Qty 1-5	**S$1,127.00** each
Qty 6+	**S$903.00** each
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General

Type:

Aspheric Lens

Physical & Mechanical Properties

Diameter (mm):

25.00 +0.00/-0.10

Centering (arcmin):

≤10

Centering, ETD (µm):

<21.8

Clear Aperture CA (mm):
22.5

Edge Thickness ET (mm):
2.3

Center Thickness CT (mm):
3.00 ±0.10

Bevel:
Protective as needed

Edges:
Diamond Turned

Shape of Back Surface:
Concave

Optical Properties

Effective Focal Length EFL (mm):
50.00 @ 4000nm

Numerical Aperture NA:
0.25

Back Focal Length BFL (mm):
47.78

Substrate:
Silicon (Si)

Aspheric Design Wavelength (nm):
4000

Asphere Figure Error, RMS @ 632.8nm:
λ/6

Coating:
BBAR (3000-5000nm)

Coating Specification:
R_{avg} <3% @ 3 - 5µm

Surface Accuracy, P-V (µm):
<0.3

Surface Quality:
60-40

f/#:
2.00

Index of Refraction (n_d):
3.422 @ 5µm

Radius R_2 (mm):
75.698

Wavelength Range (nm):
3000 - 5000

Conjugate Distance:
Infinite

Focal Length Specification Wavelength (nm):
4000

Material Properties

Coefficient of Thermal Expansion CTE (10^{-6}/°C):
2.55

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

REACH 241:
Compliant

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 (MWIR) 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 MWIR (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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