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# LightPath 390036 | 6.5mm Dia., 0.56 NA, BBAR (3000-5000nm), Molded IR Aspheric Lens

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Stock **#66-561** **8 In Stock**

Other Coating Options

- 1 + **£328**.00

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|---|---|
| Qty 1-10 | **£328.00** each |
| Qty 11-49 | **£295.20** each |
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Product Downloads

## General

**Lightpath Lens Code:**

390036

**Type:**

Aspheric Lens

## Physical & Mechanical Properties

**Diameter (mm):**

6.50 ±0.015

**Clear Aperture CA (mm):**
5.00

**Edge Thickness ET (mm):**
1.94

**Center Thickness CT (mm):**
2.50

**Bevel:**
Protective as needed

## Optical Properties

**Effective Focal Length EFL (mm):**
4.00 @ 2500nm

**Numerical Aperture NA:**
0.56

**Substrate:**
Black Diamond™ BD-2 ($Ge_{28}Sb_{12}Se_{60}$)

**Aspheric Design Wavelength (nm):**
2500

**Coating:**
BBAR (3000-5000nm)

**Coating Specification:**
$R_{avg}$ <1.0% @ 3 - 5µm

**Surface Quality:**
80-50

**f/#:**
0.89

**Index of Refraction ($n_d$) @ 10µm:**
2.6023

**Index of Refraction ($n_d$) @ 14µm:**
2.5843

**Index of Refraction ($n_d$) @ 4µm:**
2.6210

**Index of Refraction ($n_d$) @ 5µm:**
2.6173

**Wavelength Range (nm):**
3000 - 5000

**Working Distance (mm):**
3.05

**Conjugate Distance:**
Infinite

**Focal Length Specification Wavelength (nm):**
2500

## Material Properties

**Coefficient of Thermal Expansion CTE ($10^{-6}$/°C):**
14.00

**Density (g/cm$^3$):**
4.68

**Thermo-optic coefficient dn/dT:**
70 x $10^{-6}$/°C from -40° to +80°C (5 - 14 µm)

**Transformation Temperature (°C):**
285.00

## Regulatory Compliance

**RoHS 2015:**
Compliant

**Certificate of Conformance:**
View

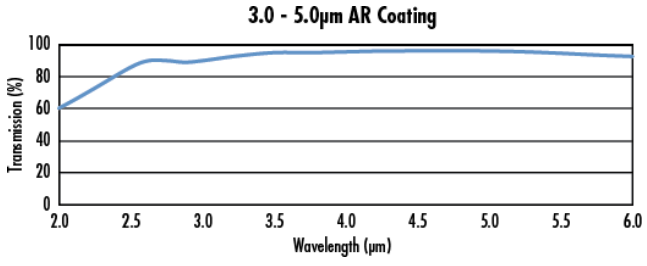
**Reach 247:**
Compliant

# Product Details

- Wavelength Range of 1.8 - 12µm
- Variety of Coating Options
- Mounted and Unmounted Versions

LightPath® Mid-Wave and Long-Wave Infrared (IR) Aspheric Lenses feature a low-cost, molded design and offer several key benefits over Germanium substrate aspheres. With a dn/dT and CTE significantly less than that of Germanium, the lenses feature a smaller change in focal length as a function of temperature change. Featuring a higher operating temperature than Germanium (which suffers 20 – 30% transmission loss at 100°C), the lenses can be used in applications including collimators for QCL lasers and as components within thermal imaging assemblies. LightPath Mid-Wave and Long-Wave Infrared (IR) Aspheric Lenses have a wavelength range of 1.8 - 12µm. These lenses are available mounted or unmounted, in a variety of coating options.

## Technical Information




## Compatible Mounts

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