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LightPath 390037 | 5.5mm Dia., 0.85 NA, BBAR (1800-3000nm), Molded IR Aspheric Lens

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Stock #66-564 CLEARANCE **1 In Stock**

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⊖ 1 ⊕ C\$350⁰⁰

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General

390037 **Lightpath Lens Code:**

Aspheric Lens **Type:**

Physical & Mechanical Properties

5.50 ±0.015 **Diameter (mm):**

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

2.24	Edge Thickness ET (mm):
3.00	Center Thickness CT (mm):
Protective as needed	Bevel:

Optical Properties

1.87 @ 9500nm	Effective Focal Length EFL (mm):
0.85	Numerical Aperture NA:
Black Diamond™ BD-2 (Ge ₂₆ Sb ₁₂ Se ₆₀)	Substrate: <input type="checkbox"/>
9500	Aspheric Design Wavelength (nm):
BBAR (1800-3000nm)	Coating:
R _{avg} <1.0% @ 1.8 - 3.0μm	Coating Specification:
80-50	Surface Quality:
0.58	f#:
2.6023	Index of Refraction (n_d) @ 10μm:
2.5843	Index of Refraction (n_d) @ 14μm:
2.6210	Index of Refraction (n_d) @ 4μm:
2.6173	Index of Refraction (n_d) @ 5μm:
1800 - 3000	Wavelength Range (nm):
0.72	Working Distance (mm):
Infinite	Conjugate Distance:
9500	Focal Length Specification Wavelength (nm):

Material Properties

14.00	Coefficient of Thermal Expansion CTE (10⁻⁶/°C):
4.68	Density (g/cm³):
70 x 10 ⁻⁶ /°C from -40° to +80°C (5 - 14 μm)	Thermo-optic coefficient dn/dT:
285.00	Transformation Temperature (°C):

Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 233:

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

1.8 - 3 μ m AR Coating

