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LightPath 390017 | 6.24mm Dia., 0.72 NA, BBAR (1800-3000nm), Mounted IR Aspheric Lens

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Stock #83-721 CLEARANCE **1 In Stock**

€250⁰⁰

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General

390017 **Lightpath Lens Code:**

Aspheric Lens **Type:**

Physical & Mechanical Properties

6.24 ±0.10 **Diameter (mm):**

Clear Aperture CA (mm):

2.60

Center Thickness CT (mm):
6.25

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
1.50 @ 2300nm

Numerical Aperture NA:
0.72

Substrate:
Black Diamond™ BD-2 (Ge₂₈Sb₁₂Se₈₀)

Aspheric Design Wavelength (nm):
2300

Coating:
BBAR (1800-3000nm)

Coating Specification:
R_{avg} < 1.0% @ 1.8 - 3.0μm

Surface Quality:
80-50

f#:
0.69

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):
1800 - 3000

Working Distance (mm):
1.24

Conjugate Distance:
Infinite

Focal Length Specification Wavelength (nm):
2300

Threading & Mounting

Mount:
Stainless Steel, M6 x 0.5 Thread

Material Properties

Coefficient of Thermal Expansion CTE (10⁻⁶/°C):
14.00

Density (g/cm³):
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 233:
[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

