

LightPath 390010 | 8.24mm Dia., 0.83 NA, BBAR (1800-3000nm), Mounted IR Aspheric Lens

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Stock **#88-077** CLEARANCE **3 In Stock**

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1

+

A\$400⁰⁰

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General	
390010	Lightpath Lens Code:
Aspheric Lens	Type:

Physical & Mechanical Properties	
8.24 ±0.10	Diameter (mm):
3.00	Clear Aperture CA (mm):

2.17	Center Thickness CT (mm):
Protective as needed	Bevel:
Optical Properties	
1.47 @ 9200nm	Effective Focal Length EFL (mm):
0.83	Numerical Aperture NA:
Black Diamond™ BD-2 (Ge ₂₈ Sb ₁₂ Se ₆₀)	Substrate: □
9200	Aspheric Design Wavelength (nm):
BBAR (1800-3000nm)	Coating:
R _{avg} <1.0% @ 1.8 - 3.0μm	Coating Specification:
80-50	Surface Quality:
0.6	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):
0.63	Working Distance (mm):
Infinite	Conjugate Distance:
Threading & Mounting	
Stainless Steel, M8 x0.5 Thread	Mount:
Material Properties	
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

