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

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Stock **#66-572** CLEARANCE **2 In Stock**

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1

+

S\$413⁰⁰

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General	
390037	Lightpath Lens Code:
Aspheric Lens	Type:

Physical & Mechanical Properties	
5.50 ±0.10	Diameter (mm):
4.00	Clear Aperture CA (mm):

Center Thickness CT (mm):		3.00
Bevel:		Protective as needed
Optical Properties		
Effective Focal Length EFL (mm):		1.87 @ 9500nm
Numerical Aperture NA:		0.85
Substrate: □		Black Diamond™ BD-2 (Ge ₂₈ Sb ₁₂ Se ₆₀)
Aspheric Design Wavelength (nm):		9500
Coating:		BBAR (1800-3000nm)
Coating Specification:		R _{avg} <1.0% @ 1.8 - 3.0μm
Surface Quality:		80-50
f/#:		0.58
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):		0.72
Conjugate Distance:		Infinite
Focal Length Specification Wavelength (nm):		9500
Threading & Mounting		
Mount:		Stainless Steel, M9 x0.5 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

