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# LightPath 390017 | 3.5mm Dia., 0.72 NA, BBAR (3000-5000nm), Molded IR Aspheric Lens

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Stock **#83-718** **15 In Stock**

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+

C\$574<sup>00</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-10       | C\$574.00 each                |
| Qty 11-49      | C\$516.60 each                |
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Product Downloads

| General       |                      |
|---------------|----------------------|
| 390017        | Lightpath Lens Code: |
| Aspheric Lens | Type:                |

| Physical & Mechanical Properties |                |
|----------------------------------|----------------|
| 3.50 ±0.015                      | Diameter (mm): |

|      |                           |
|------|---------------------------|
| 2.60 | Clear Aperture CA (mm):   |
| 0.72 | Edge Thickness ET (mm):   |
| 1.10 | Center Thickness CT (mm): |

|                      |        |
|----------------------|--------|
| Protective as needed | Bevel: |
|----------------------|--------|

Optical Properties

|               |                                  |
|---------------|----------------------------------|
| 1.50 @ 2300nm | Effective Focal Length EFL (mm): |
| 0.72          | Numerical Aperture NA:           |

|                                                                           |                                     |
|---------------------------------------------------------------------------|-------------------------------------|
| Black Diamond™ BD-2 (Ge <sub>26</sub> Sb <sub>12</sub> Se <sub>60</sub> ) | Substrate: <input type="checkbox"/> |
| 2300                                                                      | Aspheric Design Wavelength (nm):    |

|                                  |                        |
|----------------------------------|------------------------|
| BBAR (3000-5000nm)               | Coating:               |
| R <sub>avg</sub> <1.0% @ 3 - 5μm | Coating Specification: |

|       |                  |
|-------|------------------|
| 80-50 | Surface Quality: |
| 0.69  | f/#:             |

|        |                                               |
|--------|-----------------------------------------------|
| 2.6023 | Index of Refraction (n <sub>d</sub> ) @ 10μm: |
| 2.5843 | Index of Refraction (n <sub>d</sub> ) @ 14μm: |

|        |                                              |
|--------|----------------------------------------------|
| 2.6210 | Index of Refraction (n <sub>d</sub> ) @ 4μm: |
| 2.6173 | Index of Refraction (n <sub>d</sub> ) @ 5μm: |

|             |                        |
|-------------|------------------------|
| 3000 - 5000 | Wavelength Range (nm): |
| 1.24        | Working Distance (mm): |

|          |                     |
|----------|---------------------|
| Infinite | Conjugate Distance: |
|----------|---------------------|

Material Properties

|                                                          |                                 |
|----------------------------------------------------------|---------------------------------|
| 4.68                                                     | Density (g/cm <sup>3</sup> ):   |
| 70 x 10 <sup>-6</sup> /°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: |

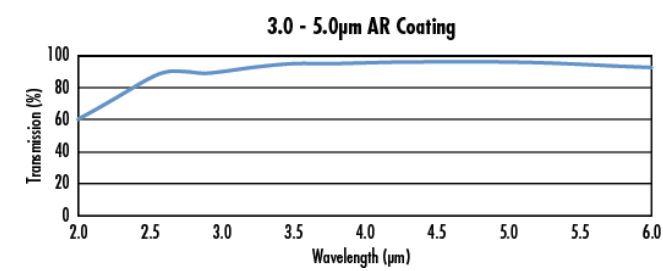
|           |            |
|-----------|------------|
| Compliant | Reach 247: |
|-----------|------------|

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



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