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TECHSPEC<sup>®</sup> 12.0mm Diameter x 42.0mm FL, 405nm V-Coat, PCX Lens



633nm Laser Line Coated Plano-Convex(PCX) Lenses



Stock **#69-340 7 In Stock**

☐ [Other Coating Options](#)

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+

S\$74<sup>.20</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | <b>S\$74.20</b> each          |
| Qty 10-25      | <b>S\$66.85</b> each          |
| Qty 26-49      | <b>S\$59.15</b> each          |
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Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

|                           |                      |
|---------------------------|----------------------|
| 12.00 +0.0/-0.025         |                      |
| Centering (arcmin):       | <1                   |
| Center Thickness CT (mm): | 2.70 ±0.05           |
| Edge Thickness ET (mm):   | 1.85                 |
| Clear Aperture CA (mm):   | 11                   |
| Bevel:                    | Protective as needed |

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Optical Properties               |                                   |
| Effective Focal Length EFL (mm): | 42.00 @ 587.6nm                   |
| Back Focal Length BFL (mm):      | 40.22                             |
| Coating:                         | Laser V-Coat (405nm)              |
| Coating Specification:           | R <sub>abs</sub> <0.25% @ 405nm   |
| Substrate: □                     | N-BK7                             |
| Surface Quality:                 | 40-20                             |
| Power (P-V) @ 632.8nm:           | 1.5λ                              |
| Irregularity (P-V) @ 632.8nm:    | λ/4                               |
| Focal Length Tolerance (%):      | ±1                                |
| Radius R <sub>1</sub> (mm):      | 21.71                             |
| f##:                             | 3.5                               |
| Numerical Aperture NA:           | 0.14                              |
| Design Wavelength DWL (nm):      | 405                               |
| Damage Threshold, By Design: □   | 3 J/cm <sup>2</sup> @ 405nm, 10ns |

|                             |           |
|-----------------------------|-----------|
| Regulatory Compliance       |           |
| RoHS 2015:                  | Compliant |
| Certificate of Conformance: | View      |
| Reach 235:                  | Compliant |

## Product Details

- <0.25% Reflection at 405nm for Diode Applications
  - BBAR Coating Options Also Available: [uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#)
  - 405nm, [532nm](#), [633nm](#), [785nm](#), [980nm](#), [1064nm](#), and [1550nm](#) V-Coated Options Offered
- TECHSPEC® 405nm Laser Line Coated Plano-Convex (PCX) Lenses are designed for maximum throughput at the specified laser wavelength. These lenses are ideal for collecting and focusing light from laser sources and their corresponding harmonics. With a maximum reflection of <0.25% per surface at the design wavelength, the lenses will provide superior transmission in applications utilizing multiple optical components. TECHSPEC® 405nm Laser Line Coated Plano-Convex (PCX) Lenses are available Laser V-Coated in a range of other wavelengths: [532nm](#), [633nm](#), [785nm](#), [980nm](#), [1064nm](#), and [1550nm](#). Other coating options are available, including [uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), and [NIR II](#).



## Technical Information



## Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
  - High-precision surface quality and flatness
  - Tight tolerances and complex geometries
  - Scalable production—from prototype to volume
- Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Compatible Mounts

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