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TECHSPEC[®] 50.0mm Diameter x 175.0mm FL, 785nm V-Coat, PCX Lens



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



Stock **#69-511** [CONTACT US](#)

☐ [Other Coating Options](#)

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1

+

C\$105⁷⁰

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Volume Pricing	
Qty 1-9	C\$105.70 each
Qty 10-25	C\$95.20 each
Qty 26-49	C\$84.70 each
Need More?	Request Quote

Product Downloads

General

Plano-Convex Lens

Type:

Physical & Mechanical Properties

Diameter (mm):

50.00 +0.0/-0.025	
Centering (arcmin):	<1
Center Thickness CT (mm):	9.00 ±0.10
Edge Thickness ET (mm):	5.48
Clear Aperture CA (mm):	49
Bevel:	Protective as needed

Optical Properties	
Effective Focal Length EFL (mm):	175.00 @587.6nm
Back Focal Length BFL (mm):	169.05
Coating:	Laser V-Coat (785nm)
Coating Specification:	R _{abs} <0.25% @ 785nm
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 ₁ (mm):	90.44
f##:	3.5
Numerical Aperture NA:	0.14
Design Wavelength DWL (nm):	785
Damage Threshold, By Design: □	5 J/cm ² @ 785nm, 10ns

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

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](#).

Product Details

- <0.25% Reflection at 785nm
- BBAR Coating Options Also Available: [uncoated](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#)
- [405nm](#), [532nm](#), [633nm](#), 785nm, [980nm](#), [1064nm](#), and [1550nm](#) V-Coated Options Offered

TECHSPEC® 785nm 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® 785nm Laser Line Coated Plano-Convex (PCX) Lenses are available Laser V-Coated in a range of other wavelengths: [405nm](#), [532nm](#), [633nm](#), [980nm](#), [1064nm](#), and [1550nm](#). Other coating options are available, including [uncoated](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), and [NIR II](#).

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Technical Information



Coating Curves

Compatible Mounts