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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](#)

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1

+

S\$105⁷⁰

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Volume Pricing	
Qty 1-9	S\$105.70 each
Qty 10-25	S\$95.20 each
Qty 26-49	S\$84.70 each
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Product Downloads

General

Type:

Plano-Convex Lens

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

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](#).



Technical Information



Coating Curves

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