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TECHSPEC® 12.7mm Dia. x 25.4mm FL, Uncoated, ZnSe Plano-Convex Lens

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TECHSPEC Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses

Stock **#39-524** **4 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ C\$295⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-10	C\$295.40 each
Qty 11-25	C\$266.00 each
Qty 26-49	C\$208.60 each
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Product Downloads

General

Plano-Convex Lens **Type:**

Physical & Mechanical Properties

12.70 +0.00/-0.10 **Diameter (mm):**

≤50.8	Centering, ETD (μm):
2.50 ±0.10	Center Thickness CT (mm):
1.93	Edge Thickness ET (mm):
11.43	Clear Aperture CA (mm):
Protective as needed	Bevel:
<50 RMS	Surface Roughness (□):

Optical Properties

25.40 @ 10.6μm	Effective Focal Length EFL (mm):
24.36	Back Focal Length BFL (mm):
Uncoated	Coating:
Coherent® Infrared ZnSe	Substrate: □
40-20	Surface Quality:
λ	Power (P-V) @ 632.8nm:
λ/20	Irregularity (P-V) @ 10.6μm:
35.63	Radius R₁ (mm):
2.00	f#:
0.25	Numerical Aperture NA:
600 - 18000	Wavelength Range (nm):
<0.0005 @ 10.6μm	Bulk Absorption Coefficient (cm⁻¹):

Electrical

λ/10	Power (P-V) @ 10.6μm:
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Regulatory Compliance

Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 242:

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

- Edmund Optics® Designed, Coherent® Manufactured
- Premier Grade ZnSe Material
- Uncoated or Broadband AR Coating Options

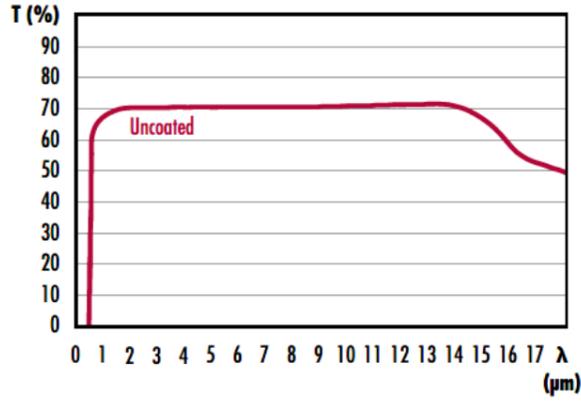
TECHSPEC® Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses are designed for focusing or collimation applications in the mid-wave and longwave infrared spectrum. Manufactured by Coherent®, these lenses feature Infrared ZnSe material with <0.0005cm⁻¹ bulk absorption at 10.6μm and are available uncoated or with a variety of broadband anti-reflection coating options. The 8-12μm coating is ideal for use with CO₂ lasers and thermal camera applications, whereas the dual band 3-12μm coating is ideal for hyperspectral applications. TECHSPEC® Zinc Selenide PCX Lenses feature an irregularity of <λ/20 at 10.6μm, 40-20 surface quality, and <50Å surface roughness. Three diameter options are available, with effective focal lengths ranging from 12.7mm to 250mm.

Notes: II-VI Incorporated is now Coherent Corp.

Special care should be taken when handling Zinc Selenide as it is a toxic material. Always wear rubber or plastic gloves to avoid risk of contamination.

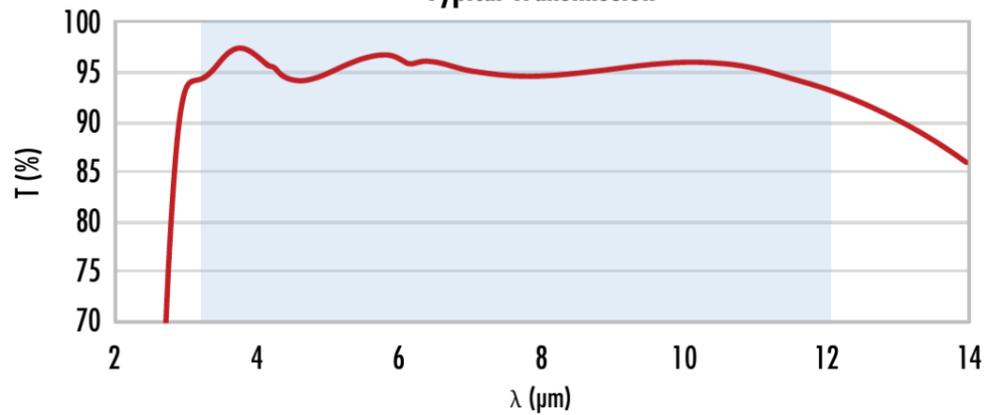
Technical Information

Uncoated – 6.3mm Thickness



AR COATED ZINC SELENIDE

ZnSe with 3-12μm AR Coating
Typical Transmission



Typical transmission of a ZnSe window with BBAR (3000-12000nm) coating at 0° AOI.

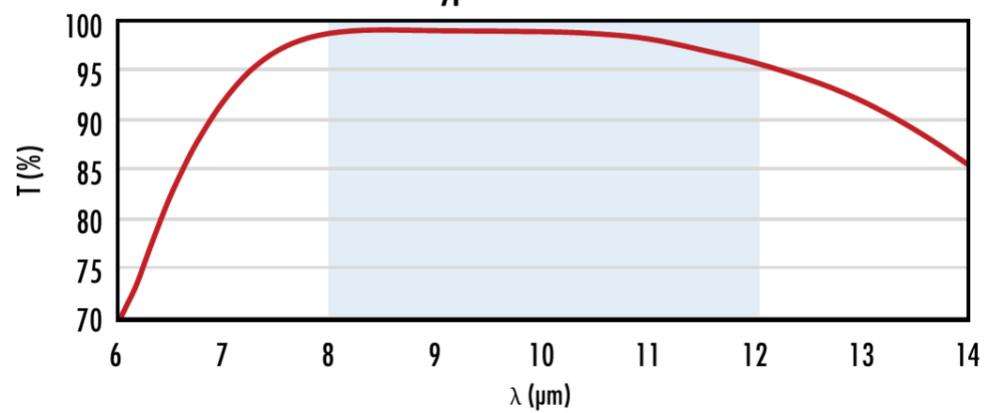
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} < 5.0\% @ 3 - 12\mu m$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

ZnSe with 8-12μm AR Coating
Typical Transmission



Typical transmission of a ZnSe window with BBAR (8000-12000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 8 - 12\mu m$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools

Compatible Mounts
