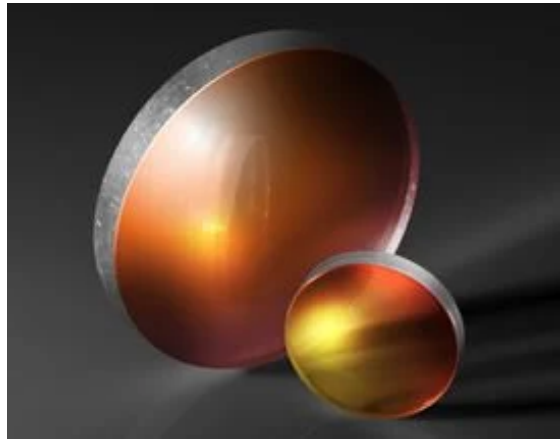


TECHSPEC® 50mm Diameter 3-12 μ m AR, Zinc Sulfide (ZnS) Multispectral
Window

#64-147



TECHSPEC® Zinc Sulfide Multispectral Windows

TECHSPEC® Zinc Sulfide (ZnS) Multispectral Windows are manufactured from a water-free, multi-spectral grade of zinc sulfide (ZnS) that has low absorption and scatter properties over its broad transmission range of 0.4 - 12 μ m. Like our TECHSPEC® Zinc Selenide Windows, Zinc Sulfide (ZnS) Multispectral is a chemical vapor deposited material which is commonly used in thermal imaging. With its excellent transmission properties in the visible and infrared, Zinc Sulfide (ZnS) Multispectral is the material of choice for systems that have both visible and mid-wave or long-wave infrared sensors. It is slightly harder and more chemically resistant than zinc selenide. TECHSPEC® Zinc Sulfide (ZnS) Multispectral Windows are offered uncoated or in a 3 - 12 μ m Broadband AR Coated Option. These windows are available in diameters ranging from 12.5 to 50.80mm with a 2, 3, or 4mm thickness.

Note: Although special handling is required, acetone may be used to remove particles or debris from the windows.

General

Type:	Protective Window
Type of Window:	Crystal

Physical & Mechanical Properties

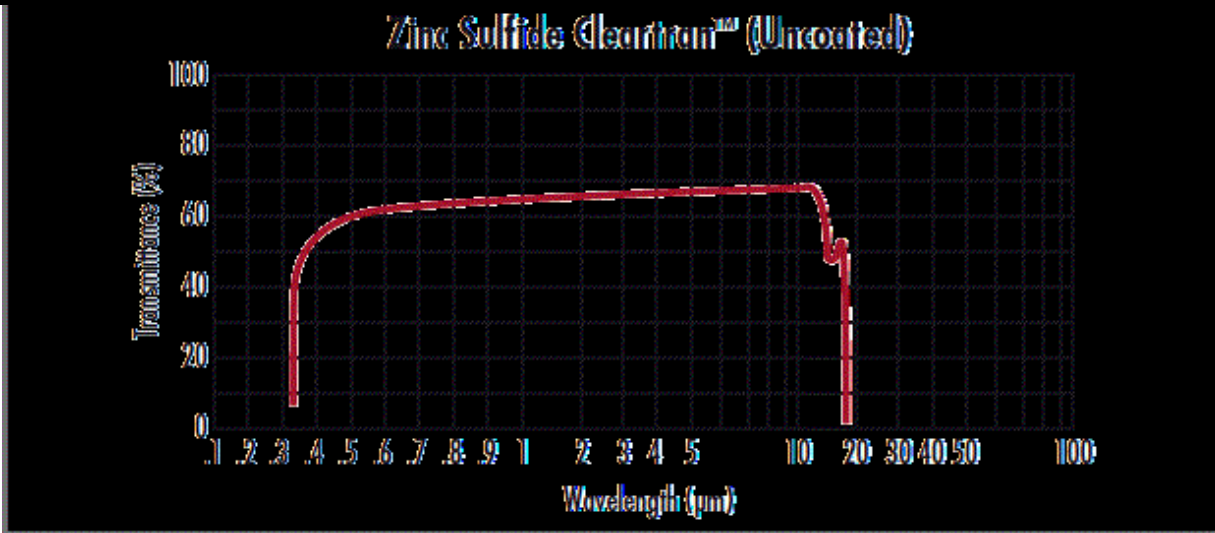
Clear Aperture CA (mm):	45.00
Diameter (mm):	50.00 +0.0/-0.1
Thickness (mm):	3.00 ±0.1
Parallelism (arcmin):	<1
Dimensional Tolerance (mm):	+0.0/-0.1
Bevel:	Protective as needed
Clear Aperture (%):	90.00
Edges:	Fine Ground
Poisson's Ratio:	0.27
Young's Modulus (GPa):	74.5
Knoop Hardness (kg/mm ²):	210.00

Optical Properties

Coating:	BBAR (3000-12000nm)
Substrate:	Zinc Sulfide Multispectral
Index of Refraction (n _d):	2.371
Surface Quality:	60-40
Coating Specification:	R _{avg} <5.0% @ 3 - 12μm
Wavelength Range (nm):	3000 - 12000
Surface Flatness (P-V):	λ/10 @ 10.6μm

Material Properties

Density (g/cm ³):	4.08
Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):	6.8





May 27, 2026

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

<i>Stock No.</i>	<i>Description</i>
64-147	50mm Diameter 3-12 μ m AR, Zinc Sulfide (ZnS) Multispectral Window

This item is EU RoHS (2015/863/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance

May 27, 2026

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



May 27, 2026

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<i>Stock No.</i>	<i>Description</i>
64-147	50mm Diameter 3-12 μ m AR, Zinc Sulfide (ZnS) Multispectral Window

This item does not contain any of the substances listed on the Reach SVHC list as of 10 June 2022 in quantities exceeding 0.1% weight by weight.

Please note the following:

- Entry 11 of Annex V of the REACH regulation EC 1907/2006 as amended by regulation 987/2008, exempts “non-hazardous” glass components from registration.
- Items considered to be packing materials and which do not form part of, or are not required for the operation of, the product, are not considered to be within scope of this declaration.
- EO does not routinely analyze products for substances not purposely added or specified within the design specifications, drawings and assembly procedures.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance

May 27, 2026

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<i>Stock No.</i>	<i>Description</i>
64-147	50mm Diameter 3-12 μ m AR, Zinc Sulfide (ZnS) Multispectral Window

Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations

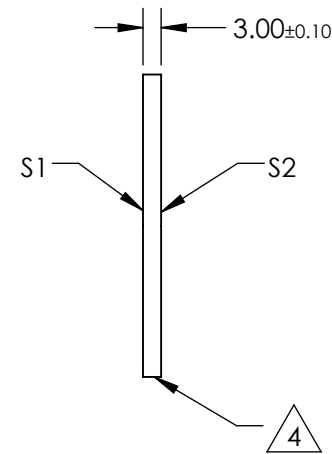
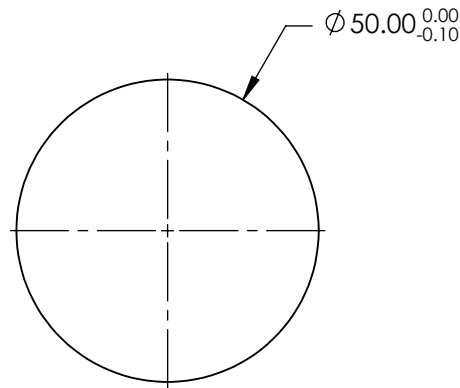
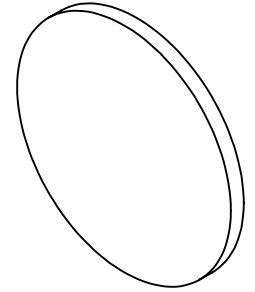
#64-147
Subject to technical modifications (27-05-2026)

NOTES:

1. SUBSTRATE:
Zinc Sulfide Multispectral
2. SURFACE S2 TO BE PARALLEL WITH S1 TO <1 ARCMIN
3. COATING (APPLY ACROSS CLEAR APERTURE)
S1 & S2: RAVG <5.0% @ 3 - 12 μ m

 4. FINE GRIND SURFACE

5. RoHS COMPLIANT



**FOR INFORMATION ONLY:
DO NOT MANUFACTURE
PARTS TO THIS DRAWING**

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
DIMENSIONS ARE FOR REFERENCE ONLY

	S1	S2
SHAPE	PLANO	PLANO
SURFACE QUALITY	60-40	60-40
SURFACE FLATNESS	$\lambda/10$ @ 10.6 μ m	$\lambda/10$ @ 10.6 μ m
BEVEL	PROTECTIVE AS NEEDED	PROTECTIVE AS NEEDED

THIRD ANGLE PROJECTION 

ALL DIMS IN mm

 **Edmund Optics®**

TITLE

50mm Diameter 3-12 μ m AR, Zinc Sulfide
Multispectral Window

DWG NO

64147

SHEET
1 OF 1