

TECHSPEC[®] 50mm Dia. x 3.0mm Thickness 3-5μm Coated Silicon Window



TECHSPEC Silicon (Si) Windows

Stock **#47-943** 12 In Stock

-

1

+

S\$610⁴⁰

ADD TO CART

Volume Pricing	
Qty 1-10	S\$610.40 each
Qty 11-25	S\$537.60 each
Qty 26-49	S\$509.60 each
Need More?	Request Quote

Product Downloads

General	
Protective Window	Type:
Physical & Mechanical Properties	
Protective as needed	Bevel:
90.00	Clear Aperture (%):

45.00	Clear Aperture CA (mm):
50.00 +0.0/-0.1	Diameter (mm):
3.00 ±0.1	Thickness (mm):
Fine Ground	Edges:
1,150.00	Knoop Hardness (kg/mm²):
<3	Parallelism (arcmin):
0.27	Poisson's Ratio:
140	Young's Modulus (GPa):

Optical Properties	
BBAR (3000-5000nm)	Coating:
R _{avg} <3.0% @ 3 - 5µm	Coating Specification:
3.422 @ 5µm	Index of Refraction (n _d):
Silicon (Si)	Substrate:
1λ	Surface Flatness (P-V):
60-40	Surface Quality:
3000 - 5000	Wavelength Range (nm):

Material Properties	
2.55	Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):
2.33	Density (g/cm³):

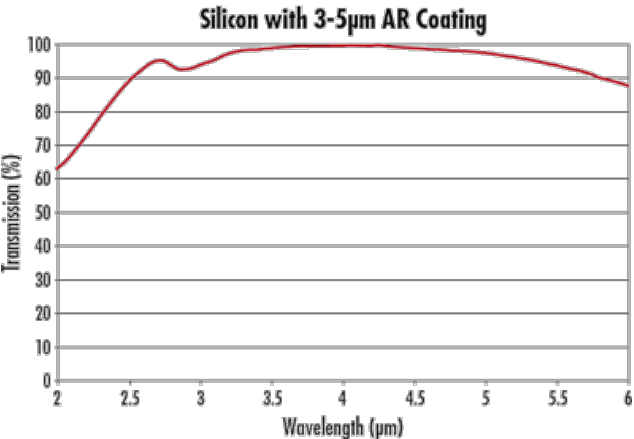
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	REACH 241:

Product Details

- Transmission from 1.2 - 7µm
- Available Uncoated or AR Coated for 1.65 - 5µm
- Ideal for Weight Sensitive Applications

TECHSPEC® Silicon (Si) Windows manufactured from optical grade silicon are popular for the 1.2 - 7µm spectral region due to their low cost and low density. Due to its low density (half that of [germanium](#) or [zinc selenide](#)), silicon is ideal for weight sensitive applications, especially those in the 1.65 - 5µm region. Density is 2.329 g/cm³ and Knoop Hardness is 1150, making it harder and less brittle than germanium. TECHSPEC® Silicon (Si) Windows available uncoated or AR coated for 1.65 - 5µm. These crystal windows are offered in diameters ranging from 10 – 76.20mm.

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
