

TECHSPEC® 50.8mm Dia. x 3mm Thickness 3-5µm Coated Silicon Window



TECHSPEC Silicon (Si) Windows

Stock **#20-041** 5 In Stock

-

1

+

A\$697⁶⁰

ADD TO CART

Volume Pricing	
Qty 1-10	A\$697.60 each
Qty 11-25	A\$614.40 each
Qty 26-49	A\$582.40 each
Need More?	Request Quote

Product Downloads

General

Type:

Protective Window

Physical & Mechanical Properties

Clear Aperture CA (mm):

45.72

Diameter (mm):

50.80 +0.0/-0.1

3.00 ±0.1	Thickness (mm):
<3	Parallelism (arcmin):
Protective as needed	Bevel:
90.00	Clear Aperture (%):
Fine Ground	Edges:
0.27	Poisson's Ratio:
140	Young's Modulus (GPa):
1,150.00	Knoop Hardness (kg/mm²):

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

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

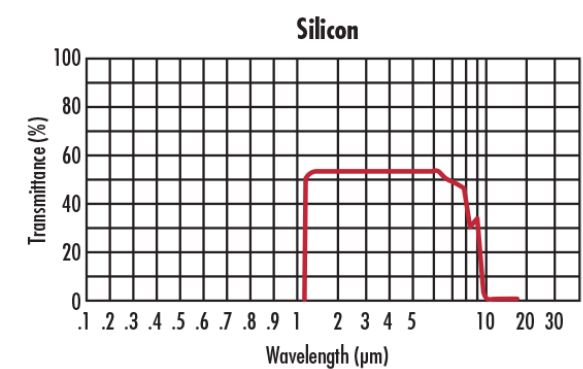
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	REACH 241:

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