

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



TECHSPEC Silicon (Si) Windows

Stock **#47-943** **11 In Stock**

⊖ 1 ⊕ £348⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-10	£348.80 each
Qty 11-25	£307.20 each
Qty 26-49	£291.20 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Protective Window **Type:**
Crystal **Type of Window:**

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):
<3	
	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):
140	
	Knoop Hardness (kg/mm²):
1,150.00	

Optical Properties

	Coating:
BBAR (3000-5000nm)	
	Substrate: <input type="checkbox"/>
Silicon (Si)	
	Index of Refraction (n_d):
3.422 @ 5µm	
	Surface Quality:
60-40	
	Coating Specification:
R _{avg} <3.0% @ 3 - 5µm	
	Wavelength Range (nm):
3000 - 5000	
	Surface Flatness (P-V):
1λ	

Material Properties

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

Regulatory Compliance

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

Need different specs or modifications?

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

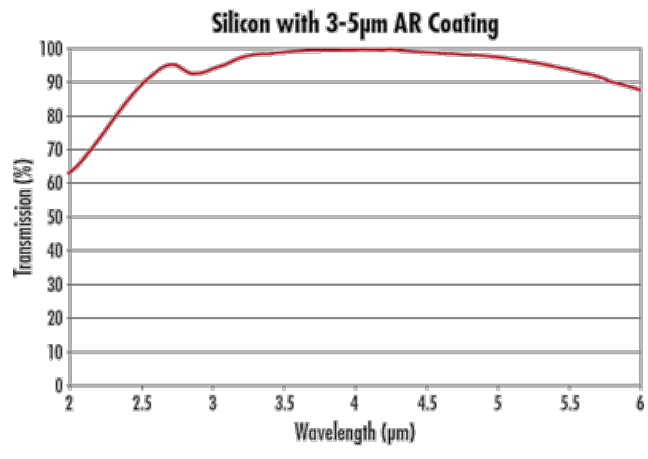
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- 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



Compatible Mounts
