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TECHSPEC® 50.8mm Dia. x 2mm Thickness 3-5µm Coated Silicon Window



TECHSPEC Silicon (Si) Windows

Stock #20-040 **CLEARANCE** 5 In Stock

⊖ 1 ⊕ **\$610⁰⁰**

ADD TO CART

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

Product Downloads

General

Protective Window **Type:**

Physical & Mechanical Properties

Protective as needed **Bevel:**

90.00 **Clear Aperture (%):**

| | |
|-----------------|---------------------------------------|
| 45.72 | Clear Aperture CA (mm): |
| 50.80 +0.0/-0.1 | Diameter (mm): |
| 2.00 ±0.1 | Thickness (mm): |
| Fine Ground | Edges: |
| 1,150.00 | Knoop Hardness (kg/mm ²): |
| <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: |
| 1.5λ | 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/cm ³): |

Regulatory Compliance

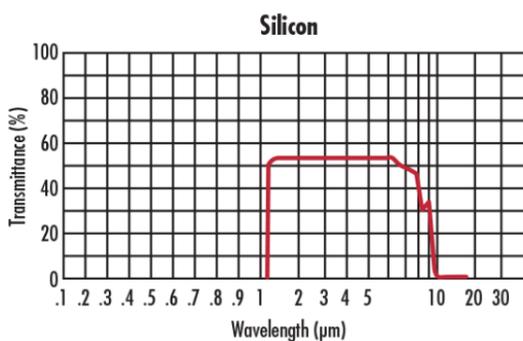
| | |
|---------------------------|-----------------------------|
| Compliant | RoHS 2015: |
| View | Certificate of Conformance: |
| Compliant | REACH 241: |

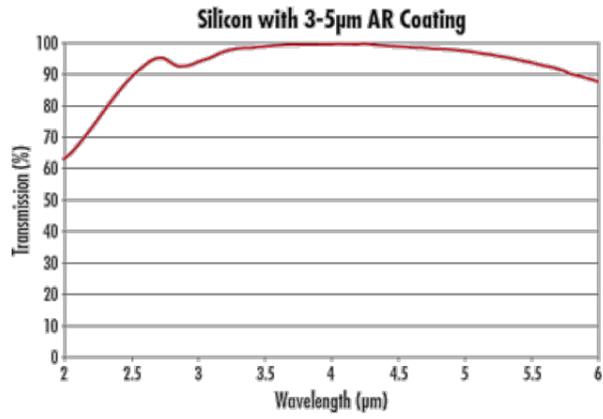
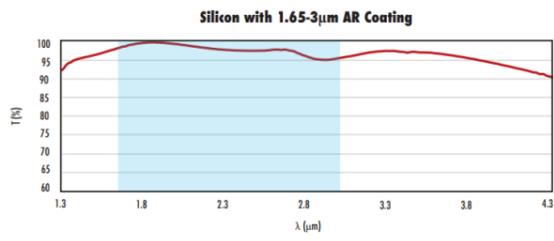
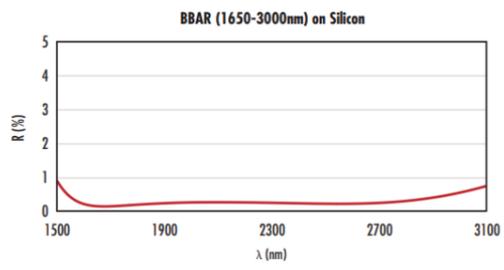
Product Details

- 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
