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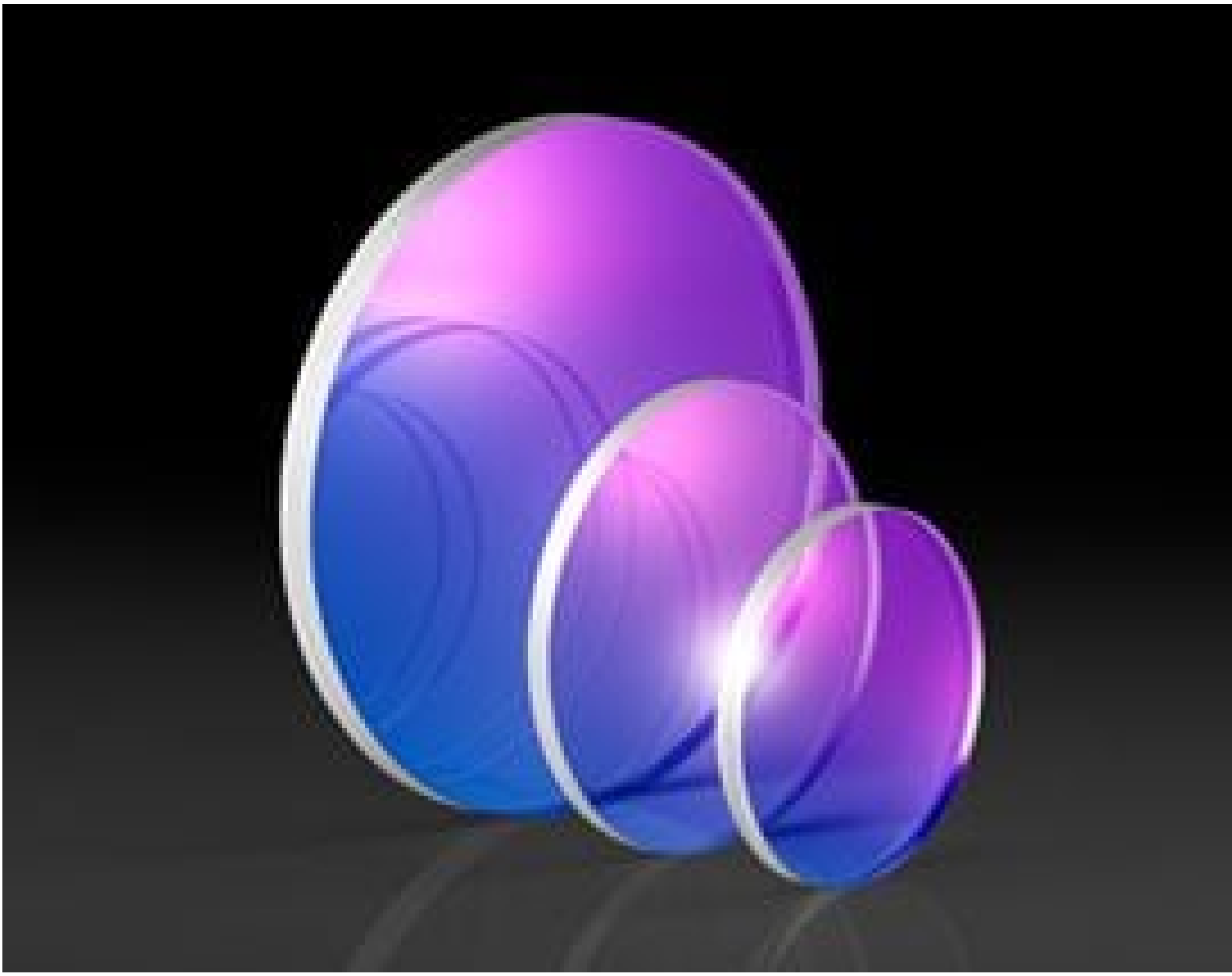
TECHSPEC 25.4mm Diameter, VIS-NIR Coated, Calcium Fluoride Window



TECHSPEC Calcium Fluoride (CaF2) Windows

Stock **#14-818** **2 In Stock**

- 1 + **€214**.00

ADD TO CART

Volume Pricing	
Qty 1-10	**€214,00** each
Qty 11-25	**€189,00** each
Qty 26-49	**€179,00** each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:
Protective Window

Type of Window:
Crystal

Physical & Mechanical Properties

Clear Aperture CA (mm):

22.86

Diameter (mm):
25.40 +0.0/-0.1

Thickness (mm):
3.00 ±0.1

Parallelism (arcmin):
<1

Bevel:
Protective as needed

Clear Aperture (%):
90

Edges:
Fine Ground

Poisson's Ratio:
0.26

Young's Modulus (GPa):
75.8

Knoop Hardness (kg/mm^2):
158.30

Optical Properties

Coating:
VIS-NIR (400-1000nm)

Substrate:
Calcium Fluoride (CaF_2) Vacuum UV Grade

Index of Refraction (n_d):
1.434

Surface Quality:
40-20

Abbe Number (v_d):
94.99

Axis Orientation:
Random

Coating Specification:
R_{abs} ≤0.25% @ 880nm
R_{avg} ≤1.25% @ 400 - 870nm
R_{avg} ≤1.25% @ 890 - 1000nm

Wavelength Range (nm):
400 - 1000

Surface Flatness (P-V):
λ/2

Damage Threshold, By Design:
5 J/cm^2 @ 532nm, 10ns

Material Properties

Density (g/cm^3):
3.18

Coefficient of Thermal Expansion CTE (10^{-6}/°C):
18.85

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 235:
Compliant

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

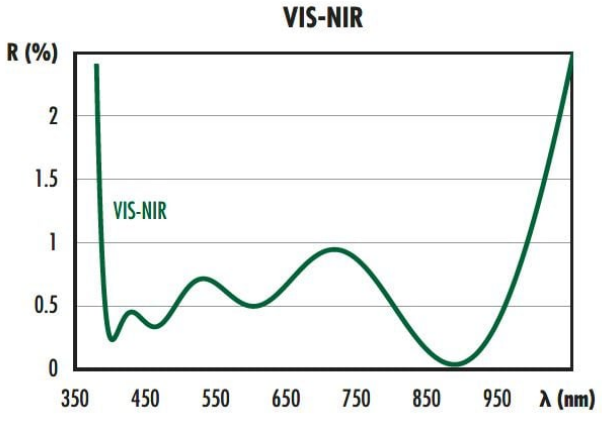
- Low Absorption, High Transmission UV Grade Calcium Fluoride
- Low Index of Refraction
- AR Coatings Spanning 250 - 5000nm Available

- **Calcium Fluoride (CaF2) Wedged Windows** also Available

TECHSPEC® Calcium Fluoride (CaF2) Windows offer a low index of refraction, providing high transmission from 200 - 7000nm when used uncoated. To further increase transmission and reduce back reflections, a variety of AR coatings are available spanning wavelength regions from the Ultra-Violet (UV) to the Mid-Wave Infrared (MWIR). The high bulk damage threshold of calcium fluoride coupled with its low absorption makes it a popular choice for use with laser systems, including excimer lasers. TECHSPEC® Calcium Fluoride (CaF2) Windows are ideal for use as protective windows for gas detectors operating in the Vacuum UV (VUV) and MWIR, UV spectroscopy systems, cryogenically cooled thermal imaging systems, and as substrates for coatings requiring wideband substrate transmission.

Note: Calcium fluoride is a relatively soft optical material and is more susceptible to scratches than typical glass windows. Calcium fluoride is also susceptible to thermal shock.

Technical Information



Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our **Optics Cleaning Resources** for step-by-step guides and best practices. For personalized assistance, **Email us** or **Chat** with our technical support team.

Component Handling Tools

Coating Curves

Compatible Mounts

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