

[See all 12 Products in Family](#)

## 50mm Dia., 3mm Thick, Zinc Selenide (ZnSe) Diffuser



IR Calcium Fluoride (CaF2) Diffusers

Stock #72-638 NEW **3 In Stock**

⊖ 1 ⊕ C\$917<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	C\$917.00 each
Qty 6-25	C\$735.00 each
Qty 26+	C\$687.40 each
Need More?	<a href="#">Request Quote</a>

### Product Downloads

#### General

IR Diffuser **Type:**  
Fine Grind S1 to 180 grit, Polished S2 **Note:**

#### Physical & Mechanical Properties

45 Specified for S2 **Clear Aperture CA (mm):**

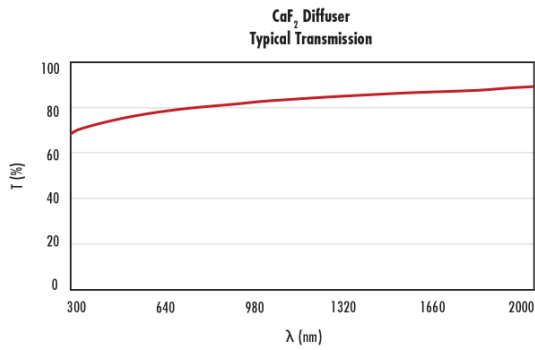
50.00 ±0.01	<b>Diameter (mm):</b>
Fine Ground	<b>Edges:</b>
3.00 ±0.10	<b>Thickness (mm):</b>
<1 arcmin	<b>Parallelism (°):</b>
Protective as needed	<b>Bevel:</b>
<b>Optical Properties</b>	
Uncoated	<b>Coating:</b>
ZnSe	<b>Substrate:</b> <input type="checkbox"/>
600 - 12000	<b>Wavelength Range (nm):</b>
80-50 Specified for S2	<b>Surface Quality:</b>
S1: N/A S2: λ/2	<b>Surface Accuracy, P-V:</b>
<b>Regulatory Compliance</b>	
<a href="#">View</a>	<b>Certificate of Conformance:</b>

## Product Details

- Evenly Ground First Surface for Even Diffusion
- Low Index of Refraction Maximizes Throughput
- Broad Transmission Range

IR Diffusers feature an evenly fine ground first surface to produce even diffusion in the visible (VIS) and infrared (IR) spectra. Available in both ZnSe and CaF<sub>2</sub> options with transmission ranges of 600nm-12000nm and 300nm-7000nm respectively, these diffusers can be used with a variety of coherent and incoherent light sources. The low index of refraction of calcium fluoride maximizes the throughput of these diffusers without use of an antireflection (AR) coating. IR Diffusers are ideal for use in laser calibration systems and general diffusion of VIS - IR light sources.

## 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