

ViewNyx

Athermalized fixed focus

o Molded LWIR Lens FL 5.4 mm f/1.1 (Model VN5.411)

Introduction



- **Precision molded LWIR lenses using chalcogenide glass**
High-volume, cost effective manufacturing
Optimized for the 8~12 um wavelength range
- **High performance LWIR lenses**
FL 5.4 mm, f/1.1 lens
Use of diffractive-aspheric lens
Ultralight, wide-angle, passively athermalized LWIR lens
- **Applications and capabilities**
Thermal imaging and thermography

Optical Specifications

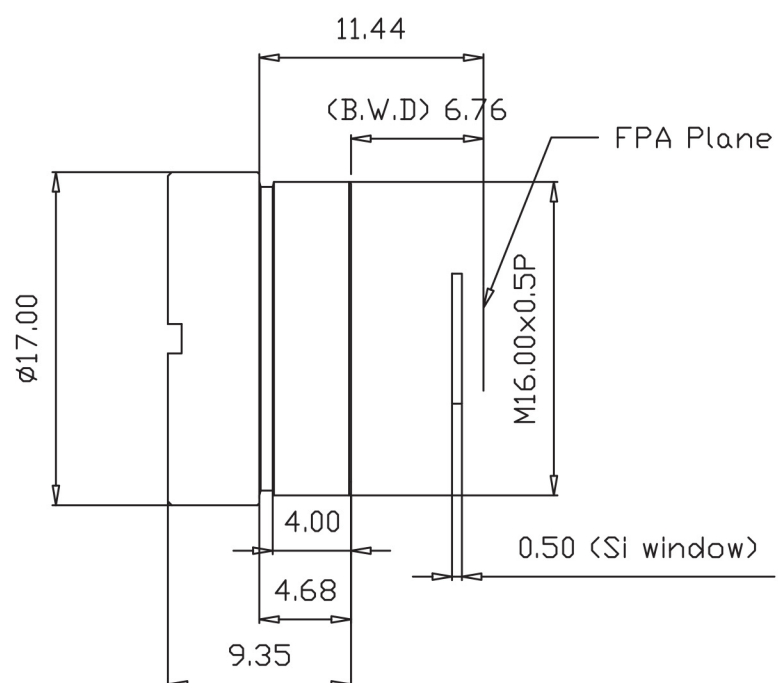
- **Focal length** 5.4 mm
- **Aperture-based f-number** f/1.14
- **Waveband** 8~12 um
- **Focus range** 0.2 m to infinity
- **Transmittance** > 95 % (AR coating)
> 90 % (DLC coating)
- **Field of view (FOV)**

Sensor array	Pixel size (um)	FOV (deg)		
		H	V	D
320 x 240	12	41.5	30.9	52.4
160 x 120	17	29.2	21.8	36.6
	12	20.5	15.4	25.7
80 x 60	35	30.0	22.5	37.7
	25	21.4	16.0	26.8

Note : Each lens is optimized for a specific detector format represented by bold values.
This table shows values for other compatible detector formats with non-optimal performance.

Mechanical Specifications

- Lens mount Threaded (M16 x P0.5)
- Weight 5.6 g
- Sealing IP67 / on front
- Dimension



Environmental Specifications

- Operating temperature $-35 \sim +60^{\circ}\text{C}$
- Storage temperature $-55 \sim +85^{\circ}\text{C}$