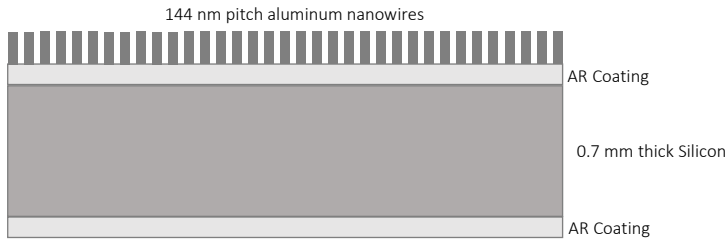


## MWIR Polarizer

This polarizer is a wire grid on an antireflection coated silicon substrate optimized for 3 to 6 microns. The ring mounting provides for ease of handling and has the polarization transmission direction marked. The wire grid surface is quite delicate and should only be cleaned non-mechanically. Standard outer diameters are one and two inch but custom sizes, shapes and unmounted polarizers are also available.

Cross section of MWIR Polarizer



### Key Features

• • •

Excellent contrast ratio

Thin profile

High transmission

Custom apertures > 2 inches available

### Polarization Suite

• • •

#### Linear Polarizers

Precision Linear Polarizer

High Contrast Linear Polarizer

Ultra-High Contrast Linear Polarizer

Glan-Thompson Polarizer

Ultra Broadband Polarizer

MWIR Polarizer

Deep Ultraviolet Polarizer

#### Beamsplitting Polarizers

Wire Grid Versalight Polarizer

Wire Grid Versalight Beam Splitter

Laser Line Beamsplitting Polarizer

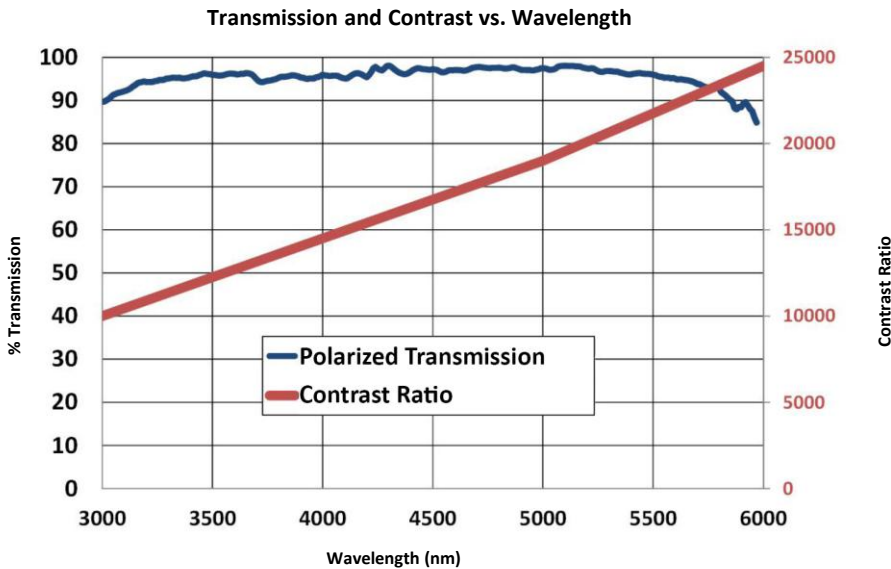
Broadband Beamsplitting Polarizer

Polarizing Bandpass Filter

#### Circular Polarizers

Dichroic Circular Polarizer

Beam Separator



Typical measured contrast ratio (red) and transmission (blue) over relevant wavelength range.



### SPECIFICATIONS

<b>Substrate Material</b>	Silicon, 0.7 mm thick
<b>Coating</b>	Double side AR
<b>Wavelength Range</b>	3 $\mu\text{m}$ to 6 $\mu\text{m}$
<b>Contrast Ratio</b>	See graph
<b>Acceptance Angle</b>	$\leq 20^\circ$
<b>Transmitted Wavefront Distortion (per inch)</b>	$\leq 1.5\lambda$ (P-V at 4 $\mu\text{m}$ ) $\leq \lambda/3$ (RMS at 4 $\mu\text{m}$ )
<b>Beam Deviation</b>	$\leq 2$ arc min
<b>Maximum Aperture</b>	Up to 4 inches circular
<b>Surface Quality</b>	80 – 50 scratch-dig

### ORDERING INFORMATION

<b><i>Diameter in. (mm)</i></b>	<b><i>Clear Aperture in. (mm)</i></b>	<b><i>Thickness in. (mm)</i></b>	<b><i>Mounted Part Number</i></b>
$\emptyset 1.00$ (25.4 mm)	$\emptyset 0.76$ (19.3 mm)	0.182 (4.62 mm)	MPM – 100
$\emptyset 2.00$ (50.8 mm)	$\emptyset 1.76$ (44.7 mm)	0.182 (4.62 mm)	MPM – 200