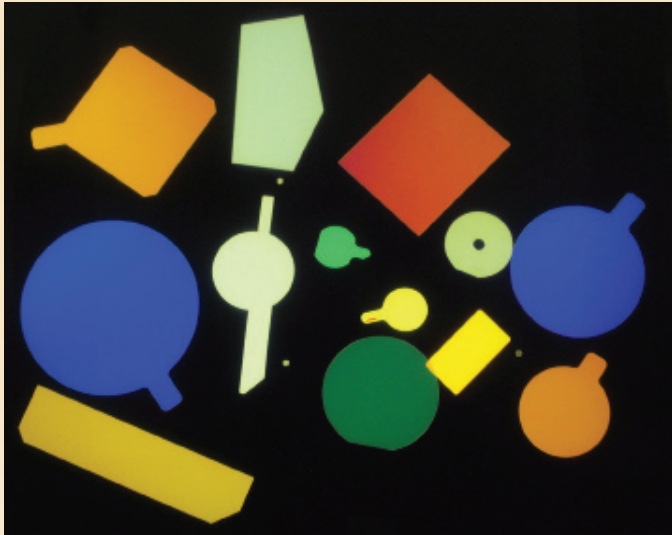


Polymer Film Retarder



Meadowlark Optics is pleased to present our Bare Polymer Retarder film. Our proprietary polymer film provides high retardance accuracy in a cost effective product which can be provided in almost any configuration and quantity. The temperature dependence of the nominal retardance is approximately 0.01%/°C, which provides a very stable and versatile polarization solution.

Manufactured in-house for wavelengths between 400 and 1800nm, this retarder is ideal for applications requiring a high precision, thin and cost effective solution. We are also able to tune the retardance to your Angle of Incidence to optimize performance. AR coatings are available on a special order basis.

Standard shapes and retardance values are available when quick turn-around is needed. We can also accommodate requests for custom shapes, sizes (up to 4 inches) and retardance values.

Please contact a Meadowlark Optics Sales Engineer for assistance with your custom requirements.



Key Features

- **Very Thin Profile**
- **Thermally Stable**
- **High Volume Scalable**
- **AR Coatings Available**
- **Custom Retardance Available**

SPECIFICATIONS	
Substrate Material	Polymer Film
Thickness	0.005 inch (127 microns), nominal
Wavelength Range	400 - 1800 nm
Retardance Ranges	
Single Layer	20 - 1600 nm
Double Layer	1600 - 3000 nm
Retardance Variation	< 2% / inch
Acceptance Angle	± 6°
TWD (P-V @ 632.8nm)	< 2λ / inch
Surface Quality	80 - 50 scratch and dig
Beam Deviation	< 30 arc-sec
Operating Temperature	-40° C to +60° C

ORDERING INFORMATION		
Round		
Diameter (in.)	Clear Aperture (in.)	Part Number
0.500	0.40	Quarter-wave: BQ-050-λ Half-wave: BH-050-λ
1.000	0.70	Quarter-wave: BQ-100-λ Half-wave: BH-100-λ
1.500	1.20	Quarter-wave: BQ-150-λ Half-wave: BH-150-λ
2.000	1.60	Quarter-wave: BQ-200-λ Half-wave: BH-200-λ
Square		
Diameter (in.)	Clear Aperture (in.)	Part Number
0.500 x 0.500	0.40 x 0.40	Quarter-wave: BQ-050x050-λ Half-wave: BH-050x050-λ
1.000 x 1.000	0.80 x 0.80	Quarter-wave: BQ-100x100-λ Half-wave: BH-100x100-λ
1.500 x 1.500	1.20 x 1.20	Quarter-wave: BQ-150x150-λ Half-wave: BH-150x150-λ
2.00 x 2.00	1.60 x 1.600	Quarter-wave: BQ-200x200-λ Half-wave: BH-200x200-λ

NOTE: Dimensions are +/- 0.010 inch