



ABS Polarizers
(Mounting Optional)

Applications

- Projection displays
- Polarizing modulators
- Polarizing cameras

Standard Product Options

Product Name	Description
ABB06C	High Transmission Blue
ABB07C	Balanced Transmission/ Contrast Blue
ABB08C	High Contrast Blue
ABG06C	High Transmission Green
ABG08C	High Contrast Green
ABR06C	High Transmission Red
ABR08C	Balanced Transmission/ Contrast Red
ABR09C	High Contrast Red

See OPT-DATA-1005 for mounting options

ProFlux® ABS series absorptive polarizers are optimized to absorb unwanted RGB light bands, reducing stray light and thermal loading caused by back reflections common in LCD projection displays. These inorganic polarizers are precision manufactured in high volumes using Moxtek's advanced NanoStack® nano technology and are ideal for applications including: high temperature projection displays, analytical systems, automotive, medical, research, and other applications. Our wire grid polarizers are available in various sizes and shapes in both bare glass or mounted forms.

Features	Benefits
Nanowire Technology	Brightness and contrast uniformity
Inorganic	High thermal resistance
	Long life compared to organic polarizer
Absorptive	Extremely low reflection
	Reduced thermal load to LCD panel

General Specifications

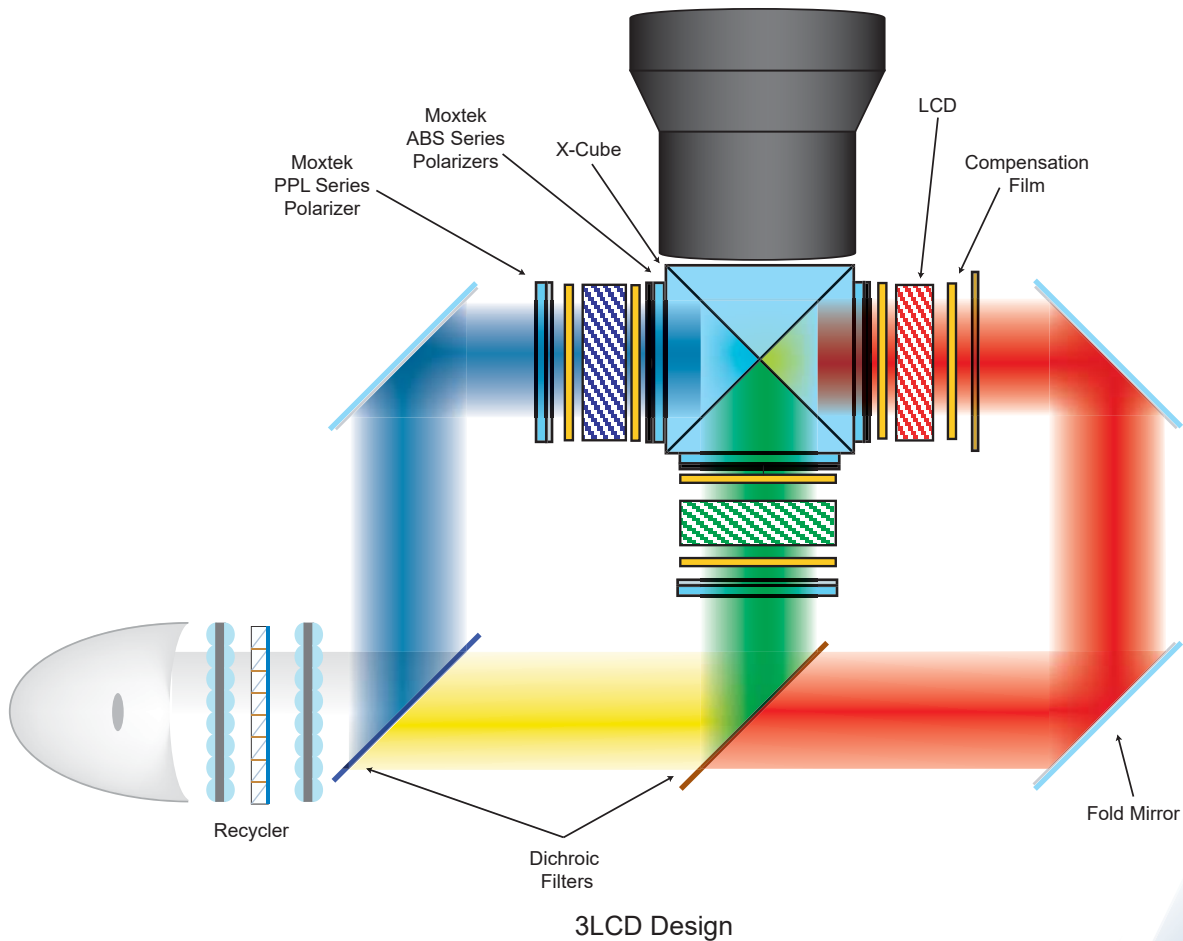
Substrate Type:	Display Grade Glass
Thickness:	0.7mm ± 0.07
Index of Refraction:	435.8nm: 1.5198 643.8nm: 1.5078
Thermal Expansion:	31.7 x 10 ⁻⁷ /°C (0-300°C)
Wavelength Range:	450nm, 550nm, 650nm, +/- 20 (see back page)
AR Coating:	420-700nm visible AR coating
Dimensional Tolerance:	± 0.2mm
Edge Exclusion:	2mm
Transmission Axis (TA):	Referenced to long side of part
TA Tolerance:	± 1°
Angle of Incidence:	0° ± 20°
Maximum Temperature:	250°C > 5,000 hours
RoHS:	Compliant

Performance and Specification

Product Type	Channel	Description	Tp% (min)	Ts% (max)	Rp% (max)	Rs% (max)
ABB06C	Blue (420-500nm)	High Transmission	91	1.0	6	10
ABB07C	Blue (420-500nm)	Balanced Trasmision/Contrast	89	0.3	6	10
ABB08C	Blue (420-500nm)	High Contrast	87	0.1	6	10
ABG06C	Green (500-590nm)	High Transmission	91.5	0.3	6	10
ABG08C	Green (500-590nm)	High Contrast	89	0.05	6	10
ABR06C	Red (610-680nm)	High Transmission	92	0.3	6	19
ABR08C	Red (610-680nm)	Balanced Trasmision/Contrast	89.5	0.05	6	19
ABR09C	Red (610-680nm)	High Contrast	87	0.03	6	19

Projection Display Application Design Example

Absorptive polarizers are channel specific (RGB) and designed for demanding applications that require high transmission, high contrast, and low Rs. See the example below of a 3LCD projection application:



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