



ABS Polarizers
(mounting optional)

Applications

- Projection displays
- Polarizing modulators
- Polarizing cameras
- Analytical systems
- Automotive

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-1011 for size and 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® technology and are ideal for many 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 in mounted forms.

Features	Benefits
Nanowire® Technology	Brightness and contrast uniformity
	±20° AOI without depolarization
Inorganic	High heat resistance
	Long life compared to organic polarizer
Absorptive	Extremely low reflection
	Reduced thermal load to LCD panel

General Specifications

Wavelength Ranges: 420-500nm, 500-590nm, 610-680nm

Substrate Type: Display Grade Glass

Thickness: 0.7mm ± 0.07

Index of Refraction: 435.8nm: 1.5198
643.8nm: 1.5078

Thermal Expansion: $31.7 \times 10^{-7}/^{\circ}\text{C}$ (0-300°C)

AOI (Angle of Incidence): 0° ± 20°

AR Coating: 420-700nm visible AR coating

Maximum Temperature: 250°C > 5,000 hours

Transmission Axis (TA): Referenced to long side of part

TA Tolerance: ± 1°

Dimensional Tolerance: ± 0.2mm

Edge Exclusion: 2mm

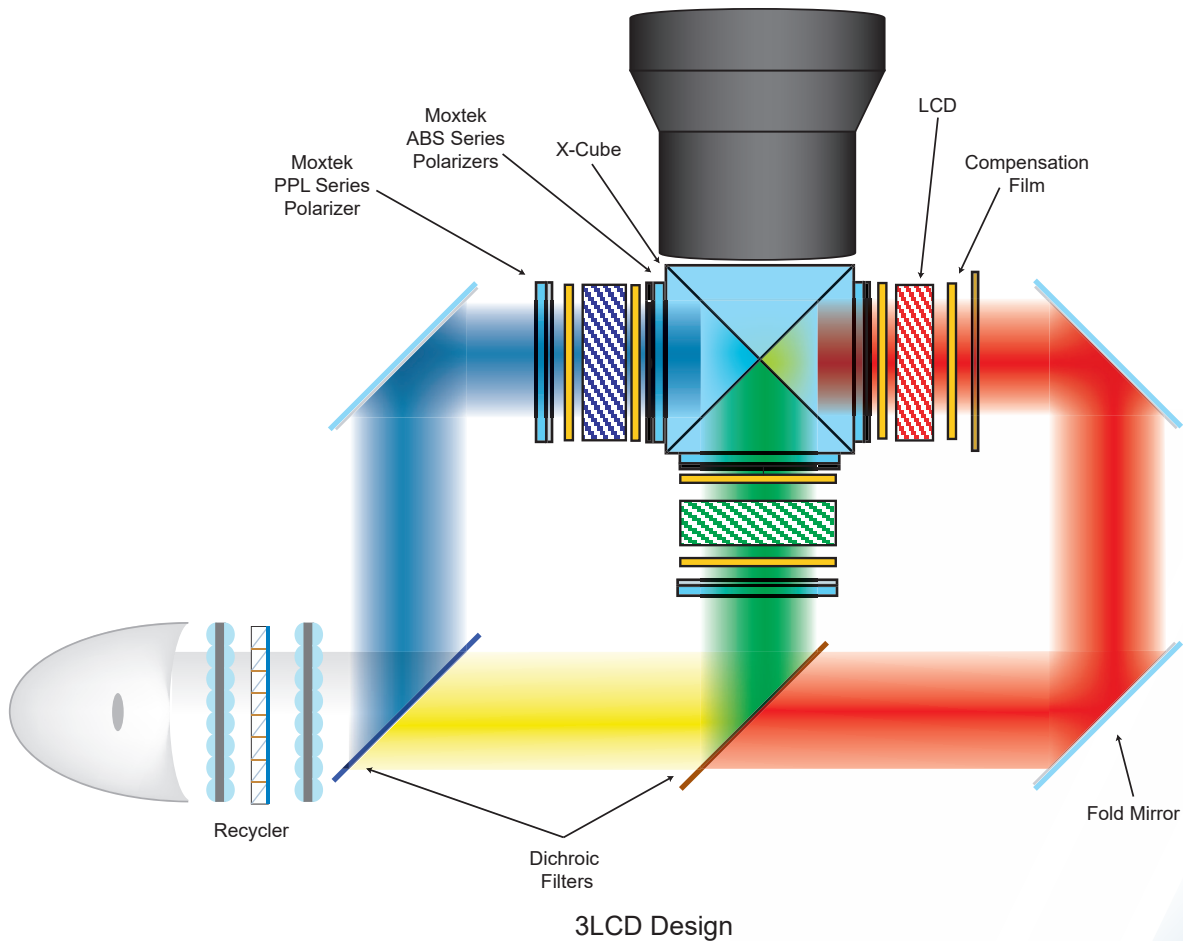
RoHS: Compliant

Performance Specifications

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:



For warranty and ordering information, please visit www.moxtek.com.



452 West 1260 North / Orem, UT 84057
 Phone 801.225.0930 / Fax 801.221.1121
www.moxtek.com
info@moxtek.com