

Close-up of ProFlux UV Polarizer

Applications

- UV Exposure
- UV Curing
- Analytical
- Instrumentation
- Alignment
- Security
- Forensics
- Astronomy
- Spectrophotometry
- Photo-Alignment
- Glan-Taylor prism replacement
- Medical



UV polarizers are used in rapid curing of ink to produce UV activated authentication patterns, as seen above.



ProFlux[®] Nanowire[®] Ultraviolet polarizers offer excellent solutions for UV and DUV applications. High transmission and high contrast choices are available. The high transmission products are indicated by UVT and the high contrast products are indicated by UVD. The large acceptance angle eases alignment concerns. Durability is equivalent to our standard visible spectrum products recognized for their high durability in hot and environmentally difficult applications.

UVD products can be used in spectrophotometers where the small size, wide acceptance angle, uniformity, and broad band capability offer substantial performance enhancements and versatility compared to Glan-Taylor prisms.

Use of polarizers in the ultraviolet spectrum is a demanding environment. Moxtek[®] ProFlux is ready for the challenge.

Features	Benefits
Nanowire Technology	Brightness and contrast uniformity
	>20° half angle without depolarization
	Reduced wavelength and AOI dependence
Inorganic	High reliability
	High heat resistance

Substrate Specifications

Type: Fused Silica

Thickness: UVT 1.0 ± 0.1mm
UVD 2.1 ± 0.2mm

Index of Refraction: 430nm: 1.4672
1000nm: 1.4504

Thermal Expansion: 0.55 x 10⁻⁶/°C

General Specifications

Wavelength Range: 240 - 400nm + (Inquire for Broadband performance)

AR Coating: Optional

Dimensional Tolerance: ± 0.4mm

Edge Exclusion: 2mm

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

TA Tolerance: ± 1°

Angle of Incidence: 0° ± 20°

Maximum Temperature: Reliability testing in progress

RoHS: Compliant

UVD Shapes: Square, rectangle, 12.5mm, 25mm, and 50mm diameter with mount

UVT Shapes: All



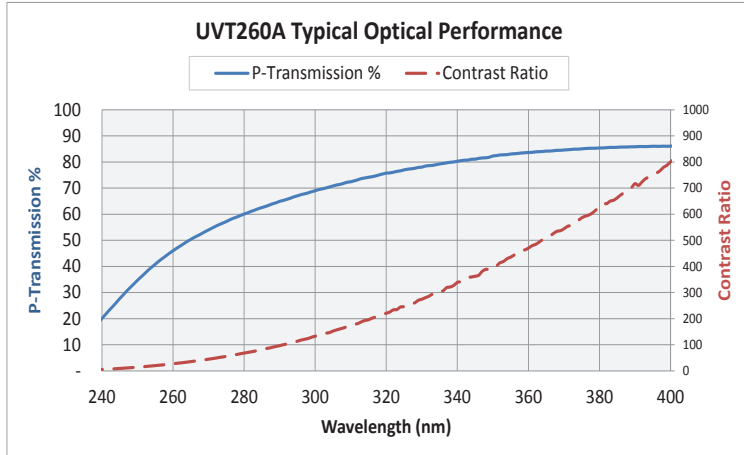
ProFlux UV Types and Applications

Performance	Range (nm)	240nm		254nm		260nm		300nm		340nm		400nm	
		Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr
UVT300A	300-340	-	-	-	-	-	-	55	50	70	100	-	-
UVT260A	260-400	-	-	-	-	40	35	55	60	70	100	75	490
Developmental Production- Limited Availability for sizes greater than 50x50mm.													
UVT254A	254	-	-	65	15	-	-	-	-	-	-	-	-
UVT240A	240-400	40	4	65	15	67	20	75	90	80	200	82	1600
UVD260A	260-400	-	-	-	-	15	400	30	10,000	58	50,000	65	150,000
UVD240A	240-400	30	10	45	45	50	60	62	800	65	5,000	70	8,000

Application Note: Depending on the application, wavelength spectrum, operating temperature, and intensity, the polarizer can be oxidized by UV light resulting in performance degradation. Moxtek recommends the polarizer be placed in a non-oxidizing environment using nitrogen or other inert gas purge to increase polarizer lifetime.

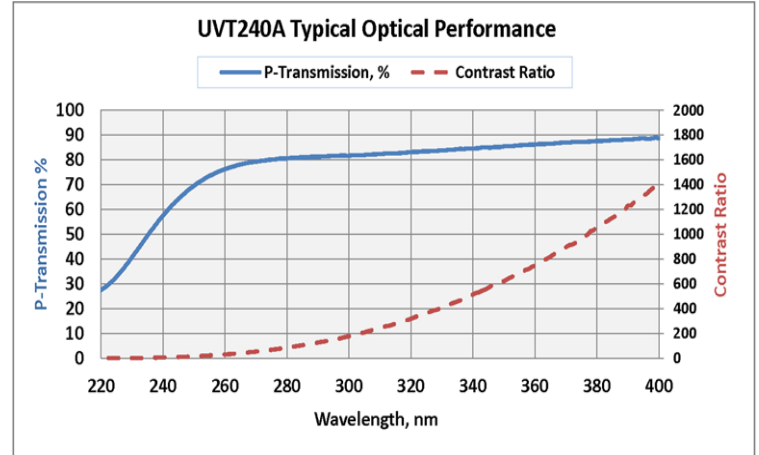
UVT Typical Performance

UVT260A Tp and Ct plot showing typical high transmission UV performance. See Table above for performance specifications.



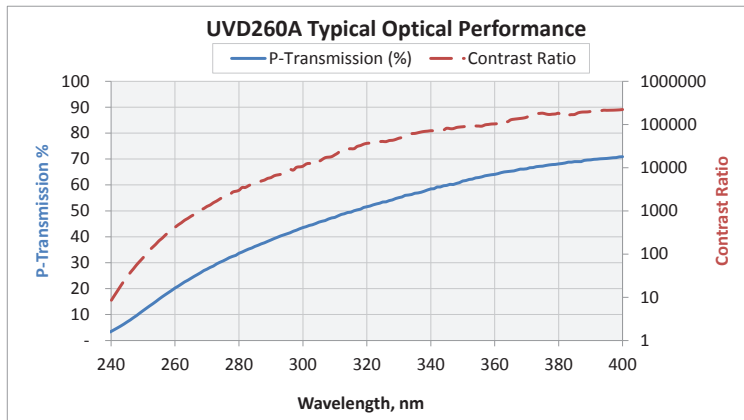
UVT Typical Performance

UVT240A Tp and Ct plot showing typical very high transmission UV performance. Notice the extended short wavelength capability of this product.



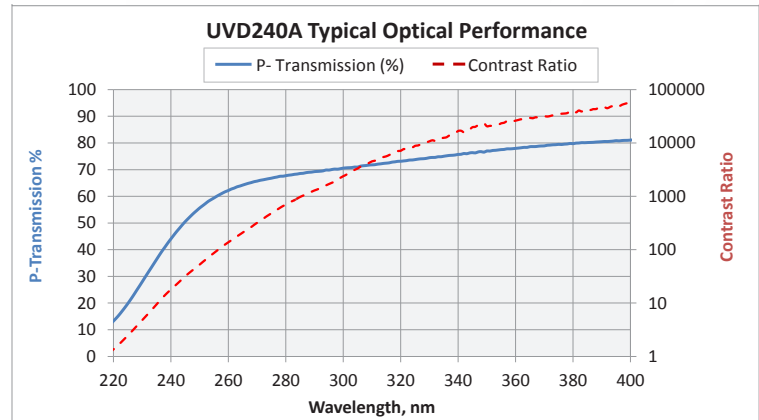
UVD Typical Performance

UVD260A high contrast polarizer for UV wavelengths.



UVD Typical Performance

UVD240A high contrast polarizer for extended UV wavelengths.



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