

UV Polarizers

UV Series Datasheet



UV Polarizers
(mounting optional)

Applications

- UV Exposure, Curing
- Photo-Alignment Processing
- Security
- Forensics
- Photo-Alignment
- Biomedical

Standard Product Options

Product Name	Description
UVT300A	High Transmission (300 - 340nm)
UVT260A	High Transmission (260 - 400nm)
UVT240A	High Transmission (240 - 400nm)
UVX240A	UVT240A + Coating (313 - 365nm)
UVD260A	High Contrast (Double) (260 - 400nm)
UVD240A	High Contrast (Double) (240 - 400nm)
*UCMNATC0	*Narrow Band, Narrow AOI (254nm)

See OPT-DATA-1011 for size and mounting options

ProFlux® Nanowire® Ultraviolet polarizers offer excellent solutions for UV and deep UV applications (240nm to 400nm). High transmission and high contrast choices are available. High transmission products are indicated by UVT and high contrast products by UVD. UVD products can be used in spectrophotometers where the small size, wide acceptance angle, grid uniformity, and broad band capability offer substantial performance enhancements.

Features	Benefits
Nanowire® Technology	Brightness and contrast uniformity
	±20° AOI without depolarization
	Broadband (except UCMNATC0)
Inorganic	High heat resistance
Protective Coating (optional)	Protect Polarizer in UV and Ozone

General Specifications

Wavelength Range: 240 - 400nm + (See table on page 2 for performance)

Substrate Type Fused Silica (UV and IR stabilized)

Thickness: UVT Types 1.0 ±0.1mm

UVD Types 2.1 ±0.2mm

Index of Refraction: 430nm: 1.4672

1,000nm: 1.4504

Thermal Expansion: $5.5 \times 10^{-7}/^{\circ}\text{C}$

AOI (Angle of Incidence): 0° ±20° (For UV type polarizers)

*0° ±5° (For UCMNATC0 type only)

AR Coating: Optional (customer specified)

Maximum Temperature: 150°C Standard

250°C Coated

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

TA Tolerance: ±1°

Dimensional Tolerance: ±0.4mm

Edge Exclusion: 2mm

RoHS: Compliant

Do not touch or clean the wire-grid polarizer surface otherwise the polarizer will be damaged.

Performance Specifications at Normal Incidence

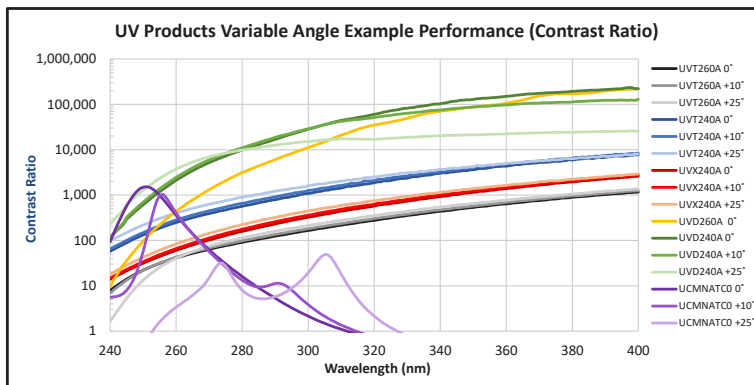
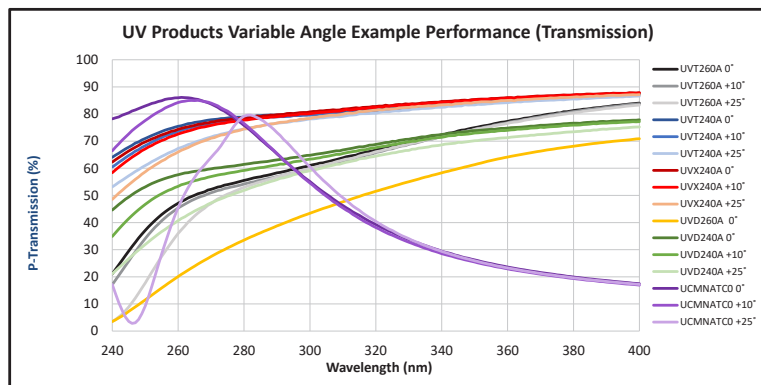
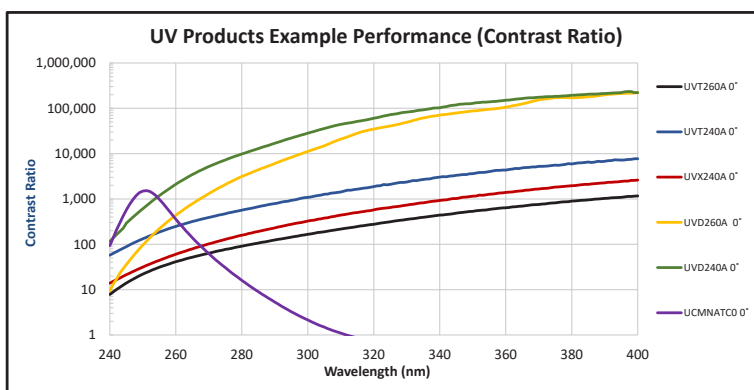
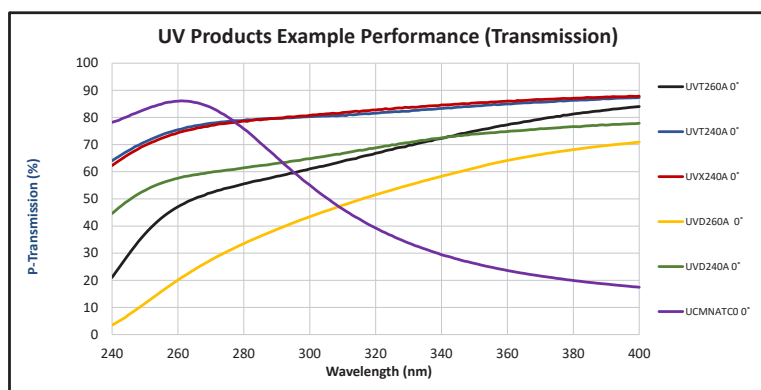
Product	Range (nm)	240nm		254nm		260nm		300nm		313nm		340nm		365nm		400nm	
		Tp% (min)	CR (min)	Tp% (min)	CR (min)	Tp% (min)	CR (min)	Tp% (min)	CR (min)	Tp% (min)	CR (min)	Tp% (min)	CR (min)	Tp% (min)	CR (min)	Tp% (min)	CR (min)
UVT300A	300-340	-	-	-	-	-	-	55	50	-	-	70	100	-	-	-	-
UVT260A	260-400	-	-	-	-	40	35	55	60	-	-	70	100	-	-	75	490
UVT240A	240-400	40	4	65	15	67	20	75	90	-	-	80	200	-	-	82	1600
UVX240A	300-400	-	-	-	-	-	-	-	-	60	100	-	-	60	100	-	-
*UVD260A	260-400	-	-	-	-	15	400	30	5,000	-	-	58	10,000	-	-	65	20,000
*UVD240A	240-400	30	10	45	45	50	60	62	800	-	-	65	5,000	-	-	70	8,000
**UCMNATC0	254	-	-	75	400	-	-	-	-	-	-	-	-	-	-	-	-

Application Note: Moxtek recommends the polarizers be placed in a non-oxidizing environment using nitrogen or other inert gas purge to maintain optimum polarizer performance. Alternatively, Moxtek can provide a coated polarizer for increased durability in UV, UV generated ozone, and high temperatures UVX240A is coated. The coating reduces performance slightly. A Moxtek sales representative can provide the best coating for your application needs.

*UVD Thickness = 2.1 mm (see general specifications)

**UCMNATC0- Should not be exposed to humid environments. This polarizer should be used with a nitrogen environment.

Example Optical Performance (Tested at 0°)



Performance data was taken from sample evaluations. Some part-to-part variation is expected.

For more detail, please use our Polarizer Comparison Tool at www.moxtek.com

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



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