

UV Polarizers ProFlux®

240 nm - 400 nm



UV Polarizers, (mounting optional)

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.

Applications

- UV Exposure, Curing
- Photo-alignment processing
- Security
- Forensics
- Biomedical applications

Features	Benefits
Nanowire technology	Brightness and contrast uniformity
	±20° AOI without depolarization
	Broadband (except UCMNATCO)
Inorganic	High heat resistance
	Protect Polarizer in UV and Ozone
Protective coatings	Protect Polarizer in UV, Ozone

Standard product options	
Product name	Description
UVT300A	High transmission (300-340 nm)
UVT260A	High transmission (260-400 nm)
UVT240A	High transmission (240-400 nm)
UVX240A	UVT240A + Coating (313-365 nm)
UVD260A	High contrast (double) (260-400 nm)
UVD240A	High contrast (double) (240-400 nm)
UCMNATCO	Narrow band, Narrow AOI* (254 nm)
*See OPT-DATA-1011 for size and mounting options	

Substrate specifications	
Substrate type	Fused Silica (UV and IR stabilized)
Thickness	UVT 1.0 ± 0.1 mm UVD 2.1 ± 0.2 mm
Index of refraction	1.4672 @ 430 nm
	1.4504 @ 1000 nm
Thermal expansion	5.5 x 10 ⁻⁷ /°C

General specifications	
Wavelength range	240 nm - 400 nm
Angle of incidence	0°± 20° (for UV type polarizers)
	*0°± 5° (for UCMNATCO type)
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	± 0.4 mm
Edge exclusion	2 mm
RoHS	Compliant

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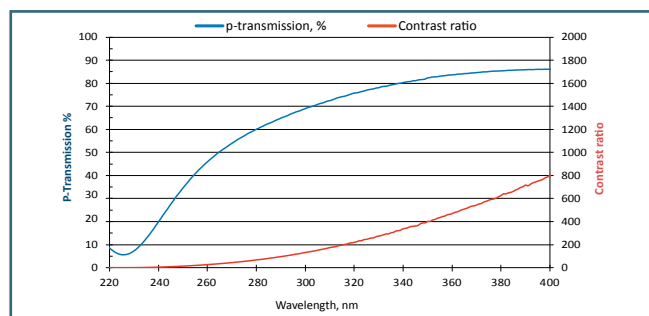
240 nm - 400 nm

ProFlux® UV types and specified performance

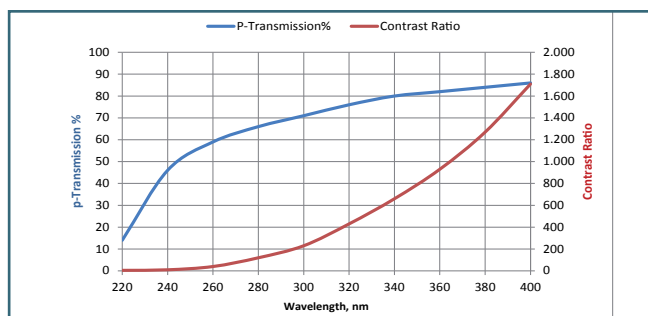
Product type	Range (nm)	240 nm		254 nm		260 nm		300 nm		313 nm		340 nm		365 nm		400 nm	
		Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr	Tp	Cr
UVT300A	300-340	-	-	-	-	-	-	55	50	-	-	70	100	-	-	-	-
UVT260A	260-400	-	-	-	-	40	35	55	60	-	-	70	100	-	-	75	490
UVT240A	240-400	40	4	65	15	67	20	75	90	-	-	80	200	-	-	82	1600
UVX240A	300-400	-	-	-	-	-	-	-	-	60	100	-	-	60	100	-	-
UVD260A*	260-400	-	-	-	-	15	400	30	5000	-	-	58	10000	-	-	65	20000
UVD240A*	240-400	30	10	45	45	50	60	62	800	-	-	65	5,000	-	-	70	8000
UCMNATC0	254	-	-	75	400	-	-	-	-	-	-	-	-	-	-	-	-

Moxtek recommends the polarizer 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)

Typical performance (tested at 0°)



UVT260A Typical performance (high transmission)



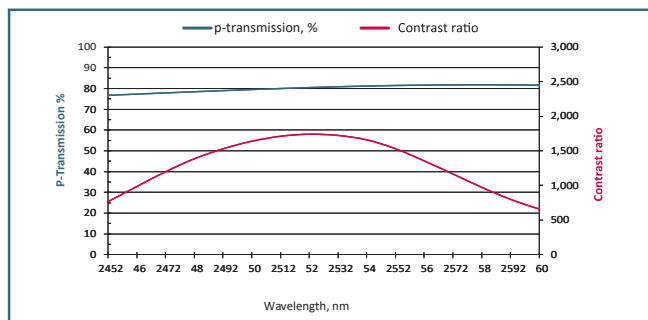
UVT240A Typical performance (high transmission)



UVT260A Typical performance (high contrast)



UVD240A Typical performance (high contrast)



UCMNATC0 Typical performance (narrow band)