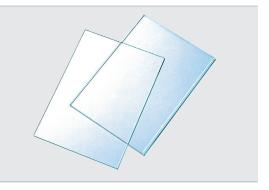


# **UV/IR-Blocker and UV-Blocker**

## High UV/IR Rejection / High UV Rejection

Materion Balzers Optics UV/IR-Blocker effectively remove damaging ultraviolet and unwanted infrared radiation produced by broadband light sources. A dielectric oxide coating design provides excellent transmission over the entire visible spectrum, without distorting the spectral emission of the light source. Filters are optimized for metal halide lamps and are particularly well suited for use in applications where high thermal loads exist. Where infrared radiation is not critical use the Materion Balzers Optics UV-Blocker.



#### **Benefits**

- Excellent UV- and broadband IR-reflection
- High visible transmission
- No color distortion
- UV- and IR-rejection independent of glass thickness
- Hard chemically and mechanically stable dielectric oxide coating
- High volume production capabilities

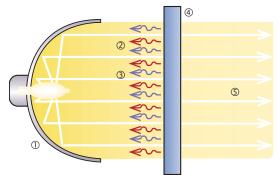
### **Applications**

- Entertainment Lighting
- Fiber optics
- Product showcases
- Museum lighting
- Illumination of arts
- Medical lighting

#### **Technical Data**

Temperature resistant up to 400 °C Spectral characteristics, AOI = 0°					
			T abs.	< 1%	up to 380 nm
			Т	= 50%	for $\lambda = 405 \pm 10$ nm
T avg.	> 90%	for $\lambda = 425 - 680$ nm (UV/IR-Blocker)			
T avg.	> 90%	for $\lambda = 425 - 760$ nm (UV-Blocker)			
Т	= 50%	for $\lambda = 730 \pm 20$ nm (UV/IR-Blocker)			
T avg.	< 5%	for $\lambda = 800-1150 \text{ nm} (\text{UV/IR-Blocker})$			
Substra	ate Mate	rial			
Heat re	esistant b	orosilicate glass			
Standa	rd size				
160 · 11	0 · 1.1 m	n			

#### Schematic of UV/IR-blocker



Lamp with reflector
IR-radiation
UV-radiation
UV/IR-blocker
Visible light

Optics Balzers AG Neugrüt 35 LI-9496 Balzers

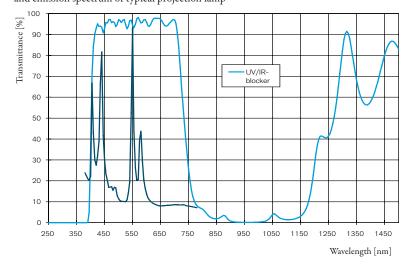
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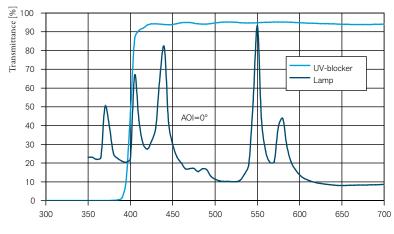
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## Spectral curve of UV/IR-blocker and emission spectrum of typical projection lamp

Spectral curve of UV-Blocker and emission spectrum of typical projection lamp



Wavelength [nm]

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2/2

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