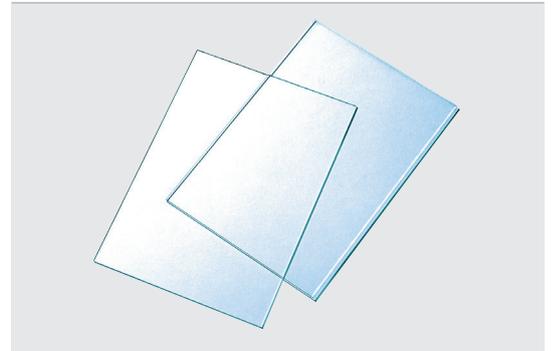




# UV/IR-Blocker and UV-Blocker

## 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

T = 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)

T = 50% for  $\lambda = 730 \pm 20$  nm (UV/IR-Blocker)

T avg. < 5% for  $\lambda = 800 - 1150$  nm (UV/IR-Blocker)

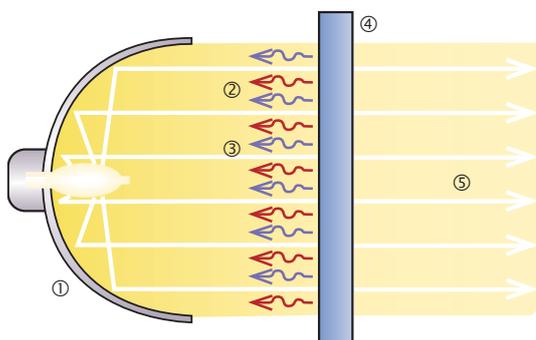
#### Substrate Material

Heat resistant borosilicate glass

#### Standard size

160 · 110 · 1.1 mm

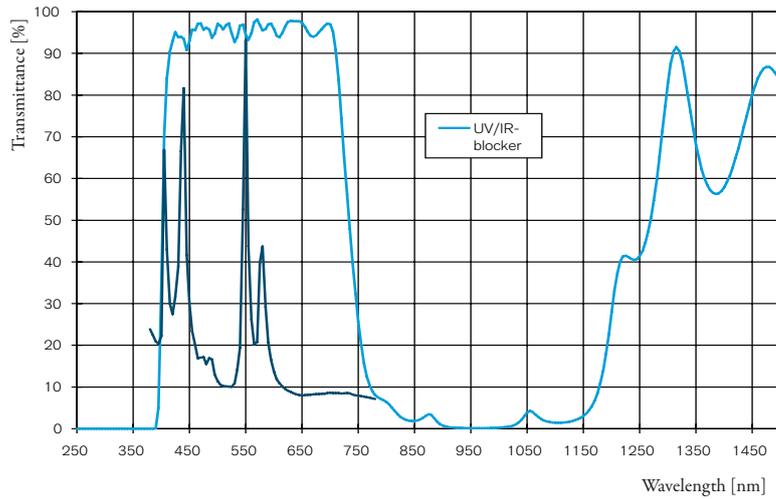
### Schematic of UV/IR-blocker



- ① Lamp with reflector
- ② IR-radiation
- ③ UV-radiation
- ④ UV/IR-blocker
- ⑤ Visible light



**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

