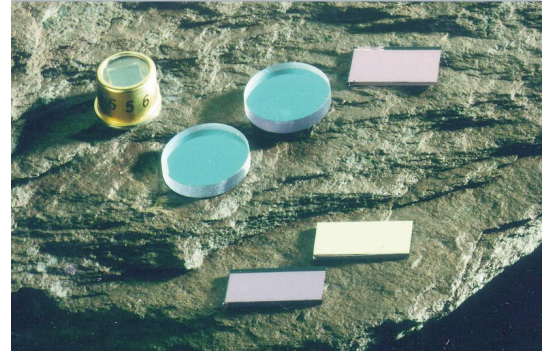


## NIR Bandpass Filters for 850-1100 nm

Stable Front Surface Coating, in the harshest environments

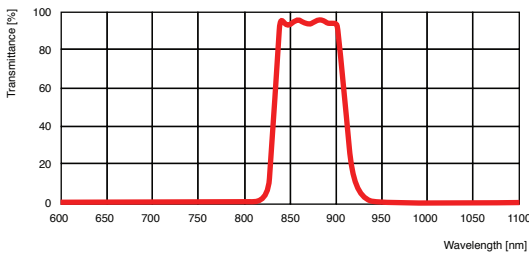
NIR Bandpass filters are used whenever there is a need to increase the signal-to-noise ratio of photodetectors (silicon). They protect detectors from undesired ambient background radiation (e.g. sunlight) or in-house illumination sources such as halogen or mercury lamps. This reduction of unwanted energy enhances detection of the target's signal.



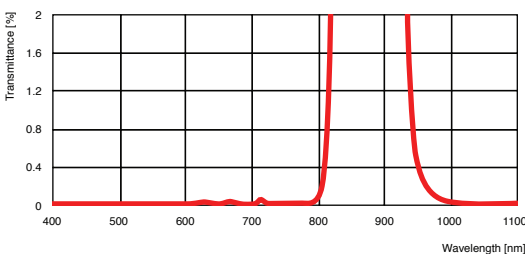
### Benefits

- Excellent environmental stability
- Minimal wavelength shift
- Various sizes and shapes, one side coating on a single glass substrate
- Various thickness available: e.g. 1.1 mm
- Design flexibility for central wavelength, half-bandwidth, blocking, according to customer's requirements

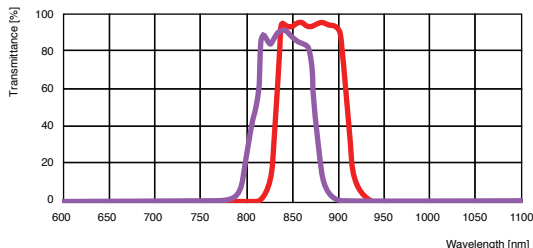
Spectrum for NIR bandpass filter CWL 850 nm at AOI = 0°



Blocking



Angle shift at AOI = 0° and AOI = 40°



### Applications

Machine vision, range finding (distance measurement), optical data communication, telecommunication, traffic control, automotive, safety and analytical systems.

### Technical Data

#### Central wavelengths

Upon customers request

#### Environmental resistance and durability tests Temperature

(MIL-M-13508 C, para 4.4.4) 5 h each at -62 °C and +71 °C

#### Hardness

(MIL-M-13508 C, para 4.4.5) 50 strokes with cheesecloth

#### Adherence

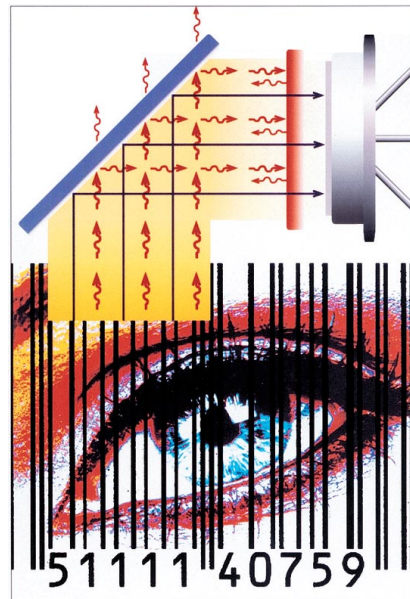
(MIL-M-13508 C, para 4.4.6) Scotch tape test

#### Humidity

(MIL-M-13508 C, para 4.4.7) 24 h at 49 °C and r.h. > 95%

#### Temperature shift

< 0.006% of CWL per °C



[oceanthinfilms.com](http://oceanthinfilms.com)

E: [info@oceanthinfilms.com](mailto:info@oceanthinfilms.com)

8060 Bryan Dairy Road  
Largo, FL 33777  
T: +1.727.545.0741

16080 Table Mountain Parkway  
Suite 100, Golden, CO 80403  
T: +1.303.273.2995