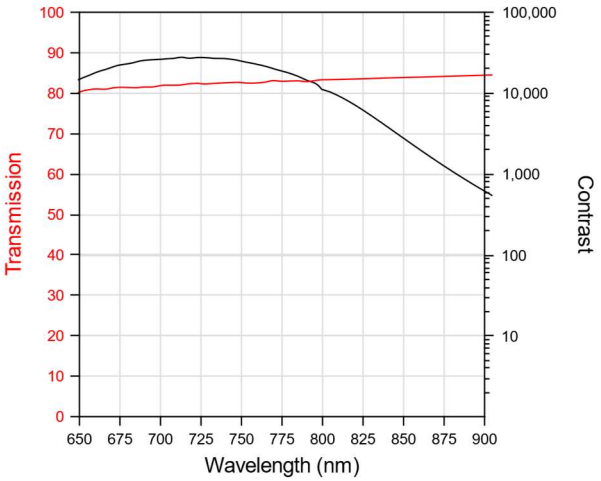
colorPol® VIS 700 BC3 T1

Developed to match special needs of visible and NIR applications between 700 nm and 870 nm. This polarizer utilizes dichroism of silver nanoparticles in glass to achieve superior contrast and durability.

Custom shapes, sizes and patterned structures are possible due to larger manufactured substrates. For assistance please contact your CODIXX Sales Engineer or one of the local distributors with your custom requirements.



Typical contrast (black) and transmittance (red)

Applications

- Optical sensors detecting at 780 nm
- Light barriers at 870 nm
- Polarizing laser diodes emitting at 730 nm

and many more

Key Benefits

- Only 90 µm thin
- Transmittance > 80 % (up to 90 % with antireflection AR coating)
- Contrast ratio greater than 1,000 : 1
- Ideal for applications using the visible and NIR range
- Customization
- Highly durable

CODIXX

www.codixx.de ● colorPol@codixx.de ● +49 39203 9630
Steinfeldstr. 3, 39179 Barleben, Germany

Spectral range	NIR
Wavelength range with contrast > 1,000 : 1 [1]	700 to 870 nm
Transmittance uncoated with AR-coating	> 80 % > 85 %
Filter thickness	90 ± 25 µm
Acceptance angle (coating reference for 0°)	± 20°
Accuracy of polarization axis to edge	< 0.5°
Usual surface quality (MIL-O-13830A: Scratch / Dig) [2]	40 / 20
Operating temperature	-50 to +400 °C
Transmitted wavefront distortion at 633 nm over an inspection area of Ø10 mm	< 3 λ
Recommended safe operation limit Laser damage threshold Continuous block Continuous pass Pulse peak power Equivalent pulse power density	 10 W/cm² 25 W/cm² 12 MW/cm² 1 µJ/cm²

[1] contrast: ratio of parallel to perpendicular transmittance
[2] other specifications available on request

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