

[See all 186 Products in Family](#)

Hoya IR80N (800nm), 50mm Dia., 2.5mm Thick, Colored Glass Longpass Filter

See More by [Hoya](#)



Stock **#66-105** 20+ In Stock

-

1

+

€105^{.00}

ADD TO CART

Volume Pricing	
Qty 1-10	€105,00 each
Qty 11-49	€91,00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Longpass Filter	Type:
Physical & Mechanical Properties	
50.00	Diameter (mm):
2.50 ±0.2	Thickness (mm):

Dimensional Tolerance (mm):	
±0.38	
Bevel:	
Protective as needed	
Optical Properties	
Cut-Off Position λ_c (nm):	
800±9	
Cut-On Wavelength (nm):	
800.00 ±9	
Glass/Filter Number:	
Hoya IR80N	
Substrate: □	
Colored Glass	
Coating:	
Uncoated	
Color:	
Black	
Surface Quality:	
80-50	
Wavelength:	
IR	
Reflection Factor P _d :	
0.92	
$\Delta\lambda$ (nm):	
<60	
TH (%):	
N/A	
Material Properties	
Density (g/cm³):	
2.85	
Transformation Temperature (°C):	
495	
Regulatory Compliance	
RoHS 2015:	
Exempt	
Reach 224:	
Compliant	
Certificate of Conformance:	
View	

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- UV, VIS and IR Pass Ranges
- VIS Can Be Used for Color Bandpass
- Also Available [Mounted](#)

Hoya Colored Glass Longpass Filters feature a colored glass substrate. These filters are manufactured from substrates with inherently different absorption and transmission properties across a specific spectral region. Hoya Colored Glass Longpass Filters have UV, VIS, and IR pass ranges. A longpass filter has low transmission in the shortwave region (stopband) and high transmission in the longwave region (passband). These filters are also available in a [mounted](#) version.

Longpass Filter Kits

Longpass filter kits are available in three different options: UV-VIS, VIS, or VIS-NIR. Each kit contains 8 filters in either 12.5mm diameter, 1" diameter, or 2" square.

UV-VIS Kit Contains: WG 295, WG 305, WG 320, L 37, GG 400, GG 420, GG 435, GG 455

VIS Kit Contains: GG 475, GG 495, OG 515, OG 530, OG 550, OG 570, OG 590, RG 610

VIS-NIR Kit Contains: RG 630, RG 665, RG 695, RG 715, RG 780, RG 830, RG 850, RG 1000

Complete Filter Kits

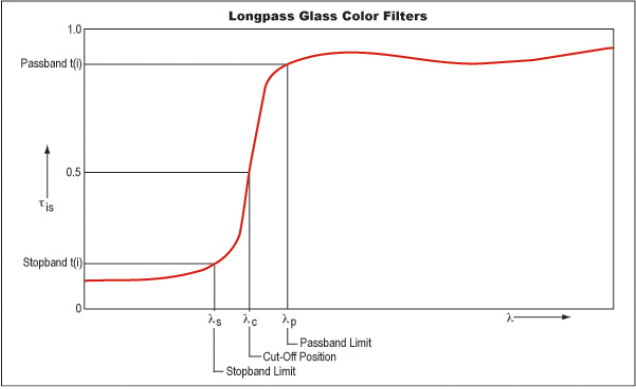
Complete filter kits are available with 12.5mm diameter, 50.0mm diameter, 1" diameter, or 2" square filters. Each kit contains all 37 Longpass Glass Color Filter types.

Note: Due to supply chain issues, our kits may be delivered with an alternative packaging solution in place of a wooden box. For any questions, please contact kits@edmundoptics.com.

Filter Simulation Software

[Click here](#) to download HOYA's colored glass filter simulation software which can be used to calculate the internal transmittance and external transmission of each HOYA glass type. The software can simulate the performance of individual filters with user specified thickness.

Technical Information



λ_s	limit of stopband: specified at 0.001% internal transmittance
λ_c	cut-off position: specified at 50% internal transmittance
λ_p	limit of the passband
t_{ip}	internal spectral transmittance at λ_p
ρ	density
T_g	transformation temperature

Compatible Mounts

;