



Advanced NIR filter portfolio for a wide range of customer needs and applications

NIR Cut Filters / Blue Filter Glass

Used in numerous applications, NIR cut filters can be found just about everywhere we look in our modern lives. They are equipped to image sensors so that natural colors are produced, and they make digital cameras respond to light as our eyes do. Special NIR cut filters are required for any display or operation control when viewed at using a night vision system (NVIS compatible equipment), which are becoming more and more commonly used by police and rescue forces. Depending on the main application, our optical filter glass types are grouped into glasses for **mobile applications** and glasses for industry applications with **high steepness** of the NIR cut, respectively.

1. Group – Mobile applications

BG47, BG59, BG60, BG61, BG62, BG66, BG67

Designed to perform in difficult environments

SCHOTT's IR filter glasses for mobile devices have been designed to meet the special demands of modern compact camera modules. Equipped with specified coatings and absorptive ink solutions, these filters deliver extraordinary image quality and meet the requirements of reliability and longevity.



Advantages

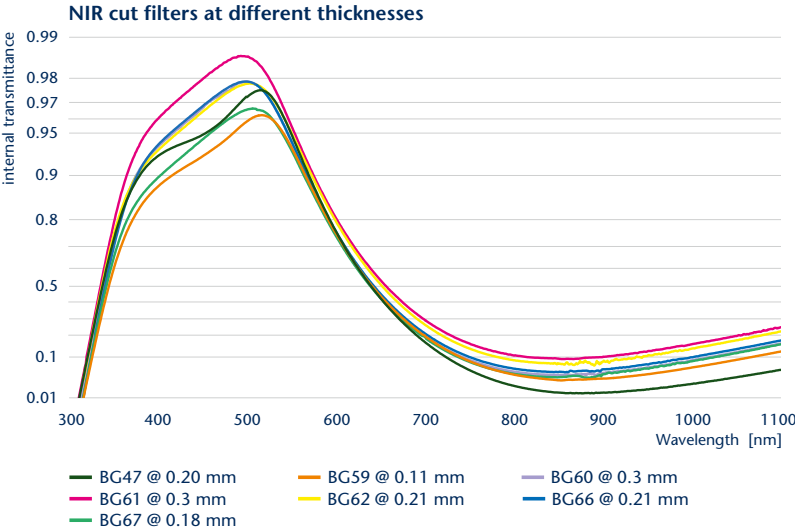
- Repeatable optical performance due to mass production
- Excellent inner quality, e.g. low striae
- Allows true color imaging
- High NIR absorption at smaller thickness

Applications

- Consumer Electronics
- Medical
- Imaging
- Surveillance

Forms of Supply

- Matt plates
- Polished filters



NEW

		BG47	BG59	BG60	BG61	BG62	BG66	BG67
Refractive index	n_e	1.5420	1.5547	1.5399	1.5370	1.5417	1.5430	1.5427
	n_d	1.5405	1.5523	1.5379	1.5350	1.5397	1.5388	1.5405
Cut-off wavelength	$\lambda_{0.5}$	633 nm	634 nm	633 nm	648 nm	644 nm	635 nm	632 nm
At thickness		@ 0.2 mm	@ 0.11 mm	@ 0.3 mm	@ 0.3 mm	@ 0.21 mm	@ 0.21 mm	@ 0.175 mm



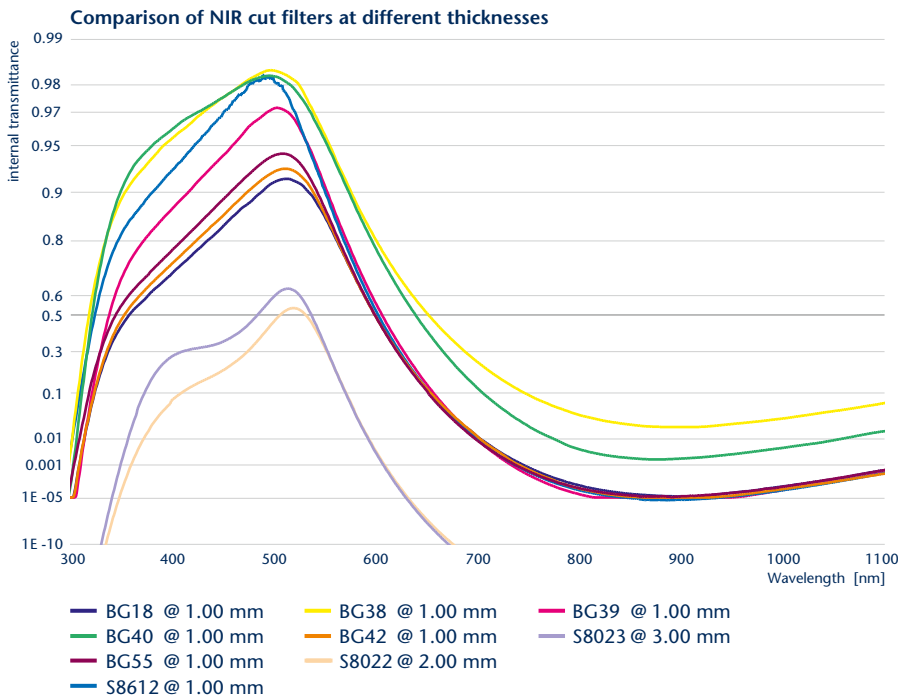
NIR Cut Filters / Blue Filter Glass

2. Group – High steepness of NIR cut

BG18, BG38, BG39, BG40, BG42, BG50, BG55, S8022, S8023, S8612

Designed to perform for high-precision optical applications

For decades, these glasses have been popular because of the excellent optical properties they provide. These optical properties include high transmission in addition to high blocking with a very narrow transition range. Furthermore, these glasses are ideal bandpass filters for visual areas when high absorption in the near infrared (NIR) wavelength range is required. The slope of the IR edge is exceptional, and guarantees a sharp distinction between visible light and NIR radiation.



Advantages

- Extraordinarily high transmittance in the visible range
- High NIR absorption
- Excellent inner quality, e.g. low striae
- Allows true color imaging

Applications

- Medical
- Imaging
- Surveillance
- NVIS (night vision)
- Industrial applications

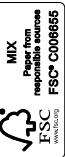
Forms of Supply

- Polished filters
- Additional coating, framing and assembly available

		BG18	BG38	BG39	BG40	BG42	BG55	S8022	S8023	S8612
Refractive index	n_e	1.5358	1.5291	1.5383	1.5320	1.5419	1.5418	1.5595	1.5437	1.5422
	n_d	1.5340	1.5272	1.5363	1.5300	1.5400	1.5398	1.5550	1.5410	1.5402
Cut-off wavelength	$\lambda_{0.5}$	595 nm	646 nm	603 nm	635 nm	595 nm	596 nm	533 nm	565 nm	599 nm
At thickness		@ 1 mm	@ 1 mm	@ 1 mm	@ 1 mm	@ 1 mm	@ 1 mm	@ 1 mm	@ 1 mm	@ 1 mm

schott.com

SCHOTT North America, Inc., 400 York Avenue, Duryea, PA 18642, USA
Phone +1 570/457-7485, info.optics@us.schott.com



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