

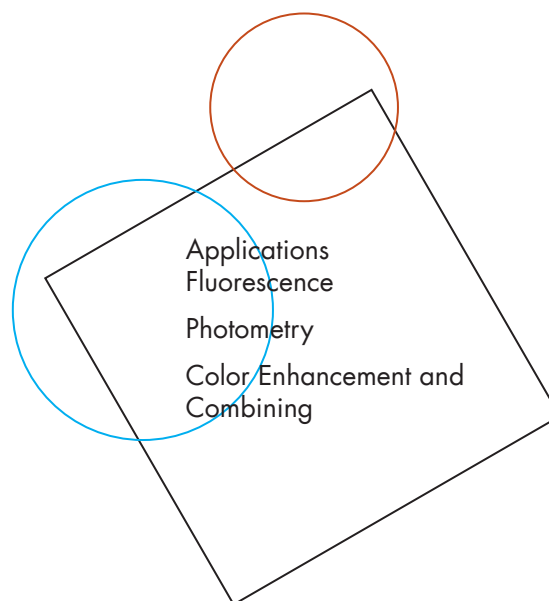
## Edge Filters



Often referred to as long wave pass (LWP) and short wave pass (SWP) filters, edge filters provide a well-defined transition between reflecting and transmitting regions. Essentially a modified quarter-wave stack, the filters use interference effects rather than absorption to isolate their spectral bands. Because edge filters will shift shorter with an increase in the angle of incidence, they are a good choice for fine-tuning the cut-on/cut-off wavelength. With their durable, first-surface dielectric coatings, Andover's edge filters are built to withstand the normal cleaning and handling required by any high-quality optical component.

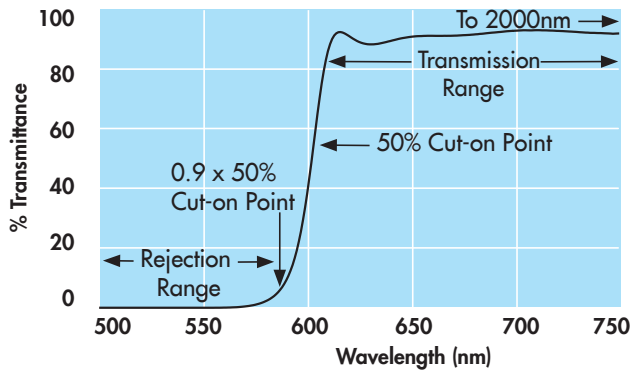
- Useful for redirecting a particular band of light
- Provide steeper transition than color glass filters
- Offer coverage over the 400–1000nm range

General Specifications	
Size Tolerance	+0.0mm/-0.5mm
Thickness	4.0mm maximum
Min. Clear Aperture	85% of outside dimension
Substrate Material	Glass
Surface Quality	80/50 per MIL-C-48497A
Coating Quality	40/20 per MIL-C-48497A
Humidity and Abrasion	Per MIL-C-675A
Operating Temperature	-50°C to +100°C
Cut-on/cut-off Slopes	6% maximum
Cut-on/cut-off Tolerance	±10nm
Transmission	
Long Wave Pass	85% average from the 50% cut-on point to 2000nm
Short Wave Pass	85% average from the 50% cut-off point to 0.6 x the 50% cut-off point
(Note: With the exception of the 400nm filter, all SWP filters will drop off in transmission at wavelengths under 425nm.)	
Rejection	
Long Wave Pass	99% or greater from 0.9 x the 50% point to the ultraviolet
Short Wave Pass	99% or greater from 1.07 x the 50% point to 1.25 x the 50% point
Effective Index of Refraction (n*)	1.7 (approximately)



# Edge Filters

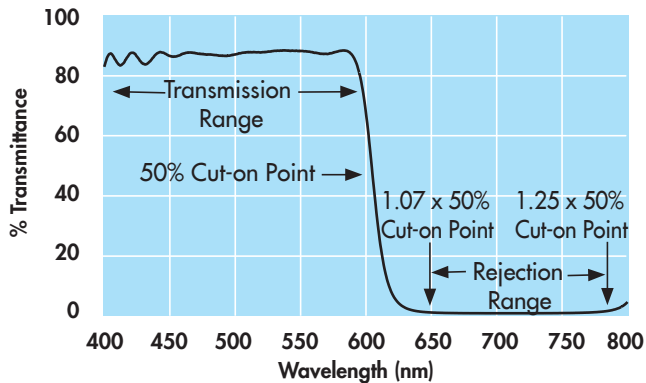
## Long Wave Pass



Near Infrared			
	Size, Shape & Part Number		
50% Point	25mm Ø ○	50mm Ø ○	50mm SQ □
750nm	750FH90-25	750FH90-50	750FH90-50S
800nm	800FH90-25	800FH90-50	800FH90-50S
850nm	850FH90-25	850FH90-50	850FH90-50S
900nm	900FH90-25	900FH90-50	900FH90-50S
950nm	950FH90-25	950FH90-50	950FH90-50S
1000nm	100FH90-25	100FH90-50	100FH90-50S
Full Set	121FA90-25	121FA90-50	121FA90-50S

Visible			
	Size, Shape & Part Number		
50% Point	25mm Ø ○	50mm Ø ○	50mm SQ □
400nm	400FH90-25	400FH90-50	400FH90-50S
450nm	450FH90-25	450FH90-50	450FH90-50S
500nm	500FH90-25	500FH90-50	500FH90-50S
550nm	550FH90-25	550FH90-50	550FH90-50S
600nm	600FH90-25	600FH90-50	600FH90-50S
650nm	650FH90-25	650FH90-50	650FH90-50S
700nm	700FH90-25	700FH90-50	700FH90-50S
Full Set	120FA90-25	120FA90-50	120FA90-50S

## Short Wave Pass



Near Infrared			
	Size, Shape & Part Number		
50% Point	25mm Ø ○	50mm Ø ○	50mm SQ □
750nm	750FL07-25	750FL07-50	750FL07-50S
800nm	800FL07-25	800FL07-50	800FL07-50S
850nm	850FL07-25	850FL07-50	850FL07-50S
900nm	900FL07-25	900FL07-50	900FL07-50S
950nm	950FL07-25	950FL07-50	950FL07-50S
1000nm	100FL07-25	100FL07-50	100FL07-50S
Full Set	124FA07-25	124FA07-50	124FA07-50S

Visible			
	Size, Shape & Part Number		
50% Point	25mm Ø ○	50mm Ø ○	50mm SQ □
400nm	400FL07-25	400FL07-50	400FL07-50S
450nm	450FL07-25	450FL07-50	450FL07-50S
500nm	500FL07-25	500FL07-50	500FL07-50S
550nm	550FL07-25	550FL07-50	550FL07-50S
600nm	600FL07-25	600FL07-50	600FL07-50S
650nm	650FL07-25	650FL07-50	650FL07-50S
700nm	700FL07-25	700FL07-50	700FL07-50S
Full Set	123FA07-25	123FA07-50	123FA07-75S

## Edge Filter Sets



Andover's long wave pass and short wave pass filter sets are available in a wide range of configurations and in three standard sizes. Also available are two variable bandpass filter sets that combine several LWP and SWP filters.

### Variable Pass Sets

Includes seven long wave pass and seven short wave pass filters, providing coverage of the 400–700nm wavelength range.

400nm  
450nm  
500nm  
550nm  
600nm  
650nm  
700nm

Visible SWP/LWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
126FA97-25	126FA97-50	126FA97-50S

Includes six long wave pass and six short wave pass filters, providing coverage of the 750–1000nm wavelength range.

750nm  
800nm  
850nm  
900nm  
950nm  
1000nm

Near Infrared SWP/LWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
127FA97-25	127FA97-50	127FA97-50S

### Short Wave Pass Sets

Includes seven short wave pass filters, spaced at 50nm increments from 400 nm to 700nm.

400nm  
450nm  
500nm  
550nm  
600nm  
650nm  
700nm

Visible SWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
123FA07-25	123FA07-50	123FA07-50S

Includes six long wave pass filters, spaced at 50nm increments from 750nm to 1000nm.

750nm  
800nm  
850nm  
900nm  
950nm  
1000nm

Near Infrared SWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
124FA07-25	124FA07-50	124FA07-50S

Visible/Near Infrared SWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
125FA07-25	125FA07-50	125FA07-50S

Combines the two sets listed above to create a 13-piece selection of filters that cover the 400–1000nm spectrum.

### Long Wave Pass Sets

Includes seven long wave pass filters, spaced at 50nm increments from 400nm to 700nm.

400nm  
450nm  
500nm  
550nm  
600nm  
650nm  
700nm

Visible LWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
120FA90-25	120FA90-50	120FA90-50S

Includes six long wave pass filters, spaced at 50nm increments from 750nm to 1000nm.

750nm  
800nm  
850nm  
900nm  
950nm  
1000nm

Near Infrared LWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
121FA90-25	121FA90-50	121FA90-50S

Visible/Near Infrared LWP Set		
Size, Shape & Part Number		
25mm Ø ○	50mm Ø ○	50mm SQ □
122FA90-25	122FA90-50	122FA90-50S

Combines the two sets listed above to create a 13-piece selection of filters that cover the 400–1000nm spectrum.