



Circular Variable Filter

Full wavelength scanning from Near IR to Long Wave IR

CI Systems' Circular Variable Filters (CVFs) are available in the wavelength range from 1.3 μm in the short infrared region of the spectrum up to 14.3 μm in the long wave infrared. CVFs are ideally suited as monochromators allowing medium-resolution spectral radiation measurements. CI Systems' CVFs are physically durable and withstand the rigors of industrial and field environment conditions. They are resistant to abrasion and humidity, and can be cleaned by conventional optical cleaning techniques.

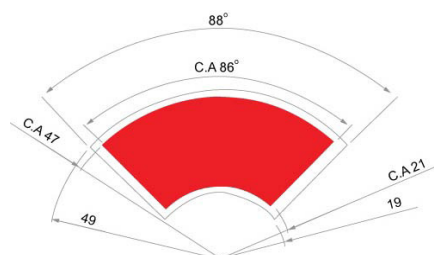
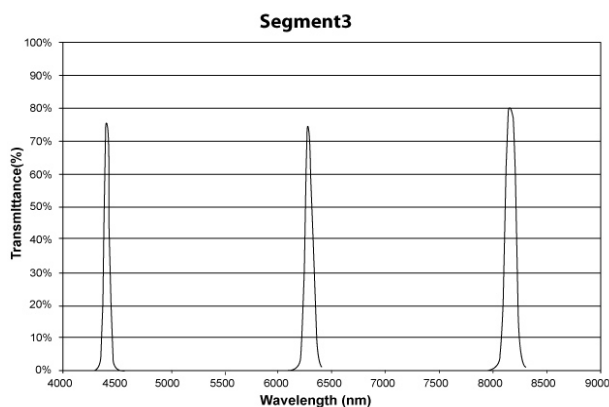
Infrared CVFs	Value in	Segment 1	Segment 2	Segment 3	Segment 4
Nominal wavelength range	μm	1.3 - 2.5	2.4 - 4.6	4.3 - 8.1	7.7-14.3
Blocking range	μm	1 to 5 (a)	1 to 7 (b)	1 to 15	1 to 15
Bandwidth (FWHM) as a % of peak wavelength, typical	%	2	1.8	1.5	1.8
Transmittance at peak	%	>25	>25	>60	>30
Out-of-band average transmittance in the blocking range	%	<0.1	<0.1	<0.1	<0.1
Thickness	mm	2.7	2.3	1	1
Substrate		Glass	Sapphire	Germanium	Germanium
MIL standard (c)	MIL-F-48616				

(a) Blocker coating up to 5 μm , substrate provides additional blocking above 5 μm .

(b) Blocker coating up to 7 μm , substrate provides additional blocking above 7 μm .

(c) Refers to: adhesion, humidity, moderate abrasion, temperature and solubility.

Example of spectral transmittance graphs measured at different positions on the CVF



The red area indicates the active filter area or Clear Aperture (CA) The linear radii dimensions are in millimeters.

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