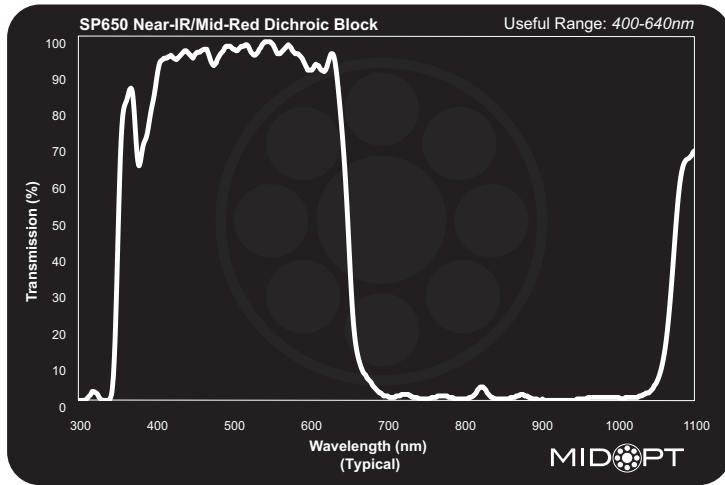
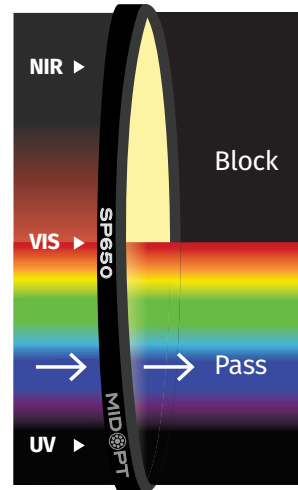


# SP650 NEAR-IR/MID-RED DICHROIC BLOCK



These filters limit the amount of infrared radiation that reaches delicate CCD and CMOS sensors. Near-IR blocking is unusually exceptional in the case of these filters. CCD/CMOS imagers are very sensitive to infrared radiation and, often, deep red wavelengths as well. Using a SP650 filter will reduce or prevent a reddish, washed out coloring of the final image.



**Useful Range:** 400-640nm  
**Cut-off Wavelength 50% T:** 650nm  
**Tolerance:** +/- 10nm  
**Peak Transmission:** 90%  
**Surface Quality:** 40/20

## FILTER MOUNT & SIZE OPTIONS

### Threaded Mount



For lenses with filter threads; Mount Sizes M13.25 - M105

Part #	Thread Dia x Pitch	Part #	Thread Dia x Pitch
SP650-13.25	M13.25 x P0.5	SP650-46	M46 x P0.75
SP650-22.5	M22.5 x P0.5	SP650-49	M49 x P0.75
SP650-25.4	M25.4 x P32TPI	SP650-52	M52 x P0.75
SP650-25.5	M25.5 x P0.5	SP650-55	M55 x P0.75
SP650-27	M27 x P0.5	SP650-58	M58 x P0.75
SP650-30.5	M30.5 x P0.5	SP650-62	M62 x P0.75
SP650-34	M34 x P0.5	SP650-67	M67 x P0.75
SP650-35.5	M35.5 x P0.5	SP650-72	M72 x P0.75
SP650-37	M37 x P0.75	SP650-77	M77 x P0.75
SP650-37.5	M37.5 x P0.5	SP650-82	M82 x P0.75
SP650-39	M39 x P0.5	SP650-86	M86 x P1.0
SP650-40	M40 x P0.5	SP650-95	M95 x P1.0
SP650-43	M43 x P0.75	SP650-105	M105 x P1.0

### C/CS Camera Mount



Threads between lens and sensor

**Part #:** SP650-25.4

### Slip Mount



- Designed for lenses without filter threads, varifocal and wide-angle lenses
- Includes locking set screws to secure adapter to lens

#### Create Part #

Use "S" and add the outside diameter of lens in mm (ex: 43mm)

*Example: SP650-S43*

### Unmounted

Custom shapes & sizes available

#### Create Part #

**CIRCLE:** Use "D" and add diameter in mm (ex: 19mm)

*Example: SP650-D19*

**RECTANGLE:** Use "R" and add length in mm (ex: 30mm) x width in mm (ex: 15mm)

*Example: SP650-R30x15*

**SQUARE:** Use "R" and add side measurement in mm (ex: 15mm)

*Example: SP650-R15*

## SP650 DATA POINTS (TYPICAL)

Wavelength (nm)	Transmission (%)	Wavelength (nm)	Transmission (%)	Wavelength (nm)	Transmission (%)	Wavelength (nm)	Transmission (%)	Wavelength (nm)	Transmission (%)
1100	68.41	940	0.11	780	0.97	620	90.45	460	95.75
1090	66.06	930	0.09	770	1.28	610	91.99	450	94.50
1080	57.64	920	0.14	760	0.72	600	90.43	440	95.86
1070	31.34	910	0.13	750	0.49	590	93.84	430	94.39
1060	11.82	900	0.15	740	0.64	580	95.48	420	94.56
1050	4.63	890	0.43	730	1.33	570	97.29	410	93.71
1040	2.15	880	1.35	720	1.54	560	94.90	400	86.54
1030	1.20	870	1.25	710	1.02	550	97.95	390	74.46
1020	0.78	860	0.55	700	1.12	540	98.03	380	65.51
1010	0.62	850	0.42	690	2.25	530	94.87	370	83.91
1000	0.63	840	0.61	680	4.75	520	97.07	360	81.17
990	0.72	830	2.25	670	7.53	510	96.60	350	37.61
980	0.96	820	3.32	660	15.20	500	96.48	340	0.37
970	0.97	810	0.85	650	46.88	490	96.54	330	0.12
960	0.57	800	0.45	640	78.79	480	93.48	320	2.43
950	0.24	790	0.50	630	95.13	470	94.07	310	0.39
								300	0.01

\*Due to continuous product improvement, specifications are subject to change without notice. For the most up-to-date information visit [www.midopt.com](http://www.midopt.com)