



HOYA CANDEO OPTRONICS CORPORATION

GALVOPTICS LTD - Harvey Rd - Basildon - Essex - SS13 1ES - UK

HOYA Y-50 LONGPASS FILTER Y50

<https://www.galvoptics.co.uk/optical-components/optical-filters/hoya-longpass-filters/>

Thickness 2.50 mm

Y50

Transmittance (T) units: %

λnm	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390
T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
λnm	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590
T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	8.4	42.5	71.2	83.0	87.2	88.9	89.6	89.8	90.0	90.1	90.1
λnm	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790
T	90.1	90.1	90.2	90.2	90.2	90.2	90.2	90.3	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.5	90.5	90.4	90.5	90.4
λnm	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990
T	90.4	90.4	90.4	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.5	90.6	90.6	90.6	90.7	90.7	90.7	90.7	90.7
λnm	1000	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1120	1140	1160	1180	1200				
T	90.8	90.8	90.8	90.8	90.9	90.8	90.8	90.8	90.9	90.9	90.9	90.9	91.0	91.0	91.0	91.0				

Refractive Index/Absorption coefficient/Reflection coefficient

λnm	400	500	600	700	800	900	1000
n	1.552	1.537	1.530	1.526	1.523	1.522	1.520
K	5.0E-03	1.5E-05	1.6E-13	7.5E-24	3.9E-34	1.2E-43	3.3E-52
P	0.911	0.914	0.916	0.917	0.918	0.918	0.918

Classes of Bubbles and Inclusions

Bubble Class
3

Color Specification

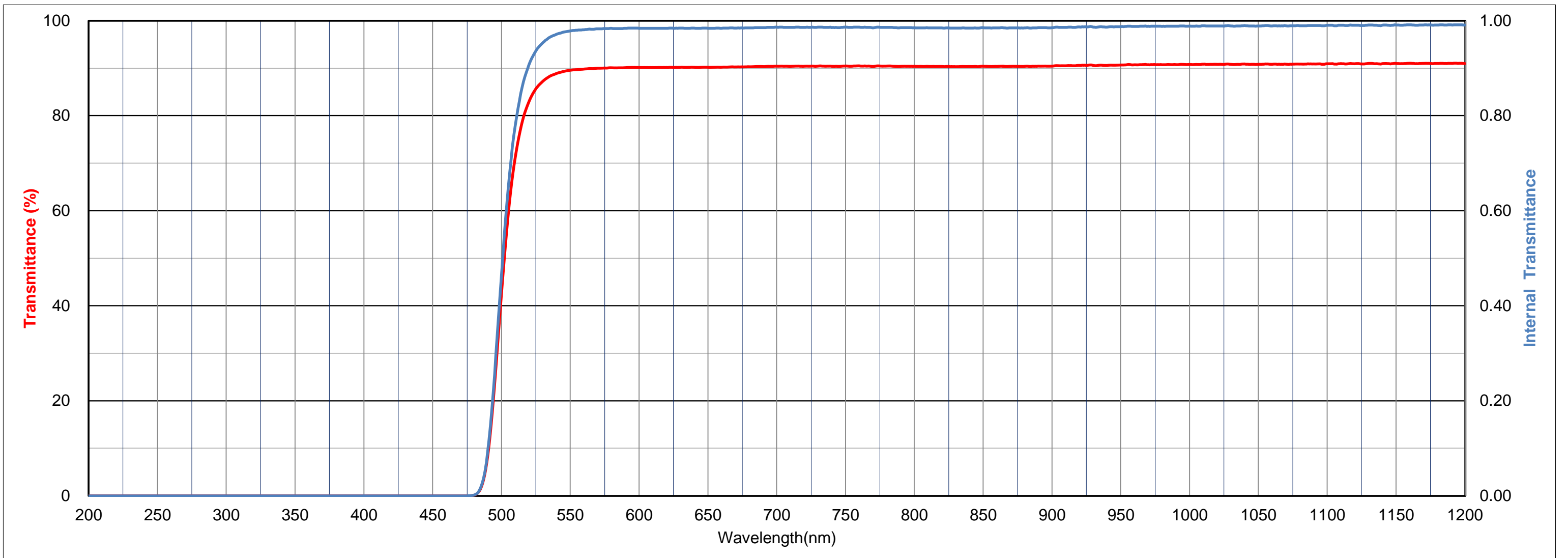
	x	y	Y	λ _d	P _e
A	0.515	0.471	84	582	91
C	0.453	0.521	79	573	93
D65	0.448	0.525	79	572	93

Properties

Chemical		Thermal				Mechanical		Others
D _w	D _A	T _g	T _s	α _{-30/70}	α _{100/300}	H _K	F _A	d
2	1	560	620	96	108	540	130	2.68

Tolerance of Transmittance (τ)

λτ (nm)	Δλ (nm)	TH (%)
500±5	<25	>85



All data is mean values of various melts.

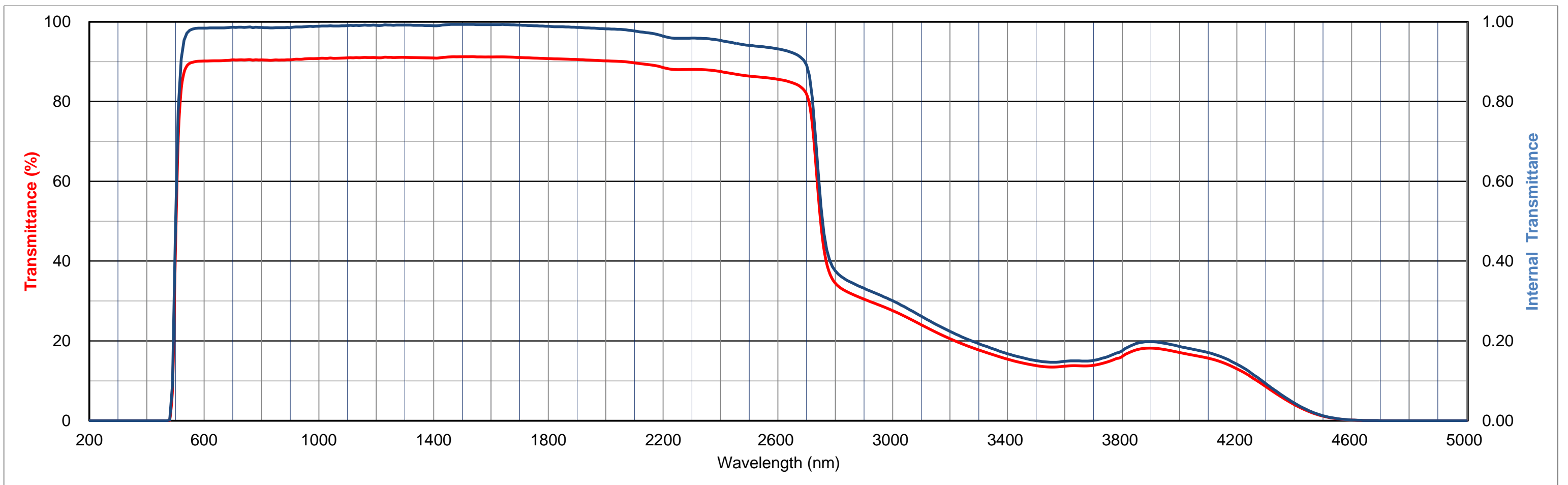
The content of this catalog is accurate as of April, 2014



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λnm	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590
T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	8.4	42.5	71.2	83.0	87.2	88.9	89.6	89.8	90.0	90.1	90.1
λnm	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790
T	90.1	90.1	90.2	90.2	90.2	90.2	90.2	90.3	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.5	90.5	90.4	90.5	90.4
λnm	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990
T	90.4	90.4	90.4	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.5	90.6	90.6	90.6	90.7	90.7	90.7	90.7	90.7
λnm	1000	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1110	1120	1130	1140	1150	1160	1170	1180	1190
T	90.8	90.8	90.8	90.8	90.9	90.8	90.8	90.8	90.9	90.9	90.9	91.0	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0
λnm	1200	1210	1220	1230	1240	1250	1260	1270	1280	1290	1300	1310	1320	1330	1340	1350	1360	1370	1380	1390
T	91.0	90.9	91.0	91.1	91.1	91.1	91.0	91.0	91.0	91.1	91.0	91.0	91.0	91.0	91.0	91.0	91.0	90.9	90.9	90.9
λnm	1400	1410	1420	1430	1440	1450	1460	1470	1480	1490	1500	1510	1520	1530	1540	1550	1560	1570	1580	1590
T	90.9	90.9	90.9	91.0	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
λnm	1600	1610	1620	1630	1640	1650	1660	1670	1680	1690	1700	1710	1720	1730	1740	1750	1760	1770	1780	1790
T	91.2	91.2	91.2	91.2	91.2	91.2	91.1	91.1	91.1	91.0	91.0	91.0	91.0	90.9	90.9	90.9	90.9	90.8	90.8	90.8
λnm	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990
T	90.7	90.7	90.7	90.7	90.7	90.6	90.6	90.6	90.5	90.5	90.5	90.5	90.5	90.4	90.4	90.4	90.3	90.3	90.2	90.2
λnm	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950
T	90.2	90.0	89.7	89.2	88.5	88.0	88.0	87.9	87.5	86.9	86.4	86.0	85.5	84.7	81.8	49.1	34.5	32.0	30.5	29.1
λnm	3000	3050	3100	3150	3200	3250	3300	3350	3400	3450	3500	3550	3600	3650	3700	3750	3800	3850	3900	3950
T	27.6	25.9	24.0	22.2	20.5	19.0	17.7	16.5	15.4	14.5	13.8	13.4	13.7	13.8	13.9	14.8	16.1	17.8	18.2	17.8
λnm	4000	4050	4100	4150	4200	4250	4300	4350	4400	4450	4500	4550	4600	4650	4700	4750	4800	4850	4900	4950
T	17.1	16.4	15.7	14.6	13.0	10.9	8.6	6.2	4.0	2.3	1.1	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
λnm	5000																			
T	0.0																			



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