



HOYA CANDEO OPTRONICS CORPORATION

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

HOYA R-70 LONGPASS FILTER R70

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

Thickness 2.50 mm

R70

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
λnm	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790
T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	12.0	40.9	67.1	80.3	85.8	88.1	89.0	89.5	89.7	89.8	89.8
λnm	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990
T	89.9	89.9	90.0	90.0	90.0	90.1	90.1	90.1	90.1	90.2	90.2	90.3	90.3	90.3	90.5	90.4	90.4	90.5	90.5	90.6
λnm	1000	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1120	1140	1160	1180	1200				
T	90.6	90.6	90.7	90.7	90.6	90.6	90.6	90.6	90.7	90.7	90.7	90.7	90.8	90.8	90.8	90.8				

Refractive Index/Absorption coefficient/Reflection coefficient

λnm	400	500	600	700	800	900	1000
n	1.562	1.552	1.546	1.543	1.541	1.540	1.539
K	6.0E-04	4.2E-04	1.5E-04	1.8E-05	8.2E-12	9.0E-21	1.7E-30
P	0.908	0.911	0.912	0.913	0.913	0.914	0.914

Classes of Bubbles and Inclusions

Bubble Class
3

Color Specification

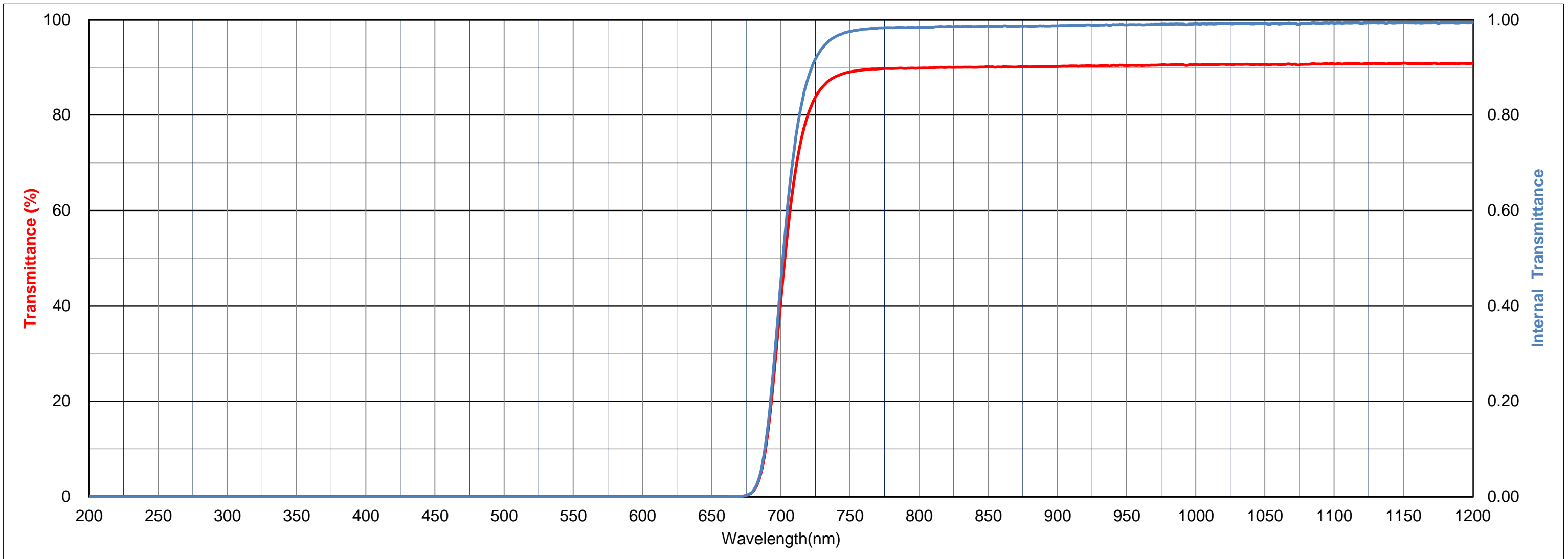
	x	y	Y	λ _d	P _e
A	-	-	-	-	-
C	-	-	-	-	-
D65	-	-	-	-	-

Properties

Chemical		Thermal				Mechanical		Others
D _w	D _A	T _g	T _s	α _{-30/70}	α _{100/300}	H _K	F _A	d
1	3	525	575	98	115	470	160	2.86

Tolerance of Transmittance (τ)

λτ (nm)	Δλ (nm)	TH (%)
700±10	<45	>85



All data is mean values of various melts.

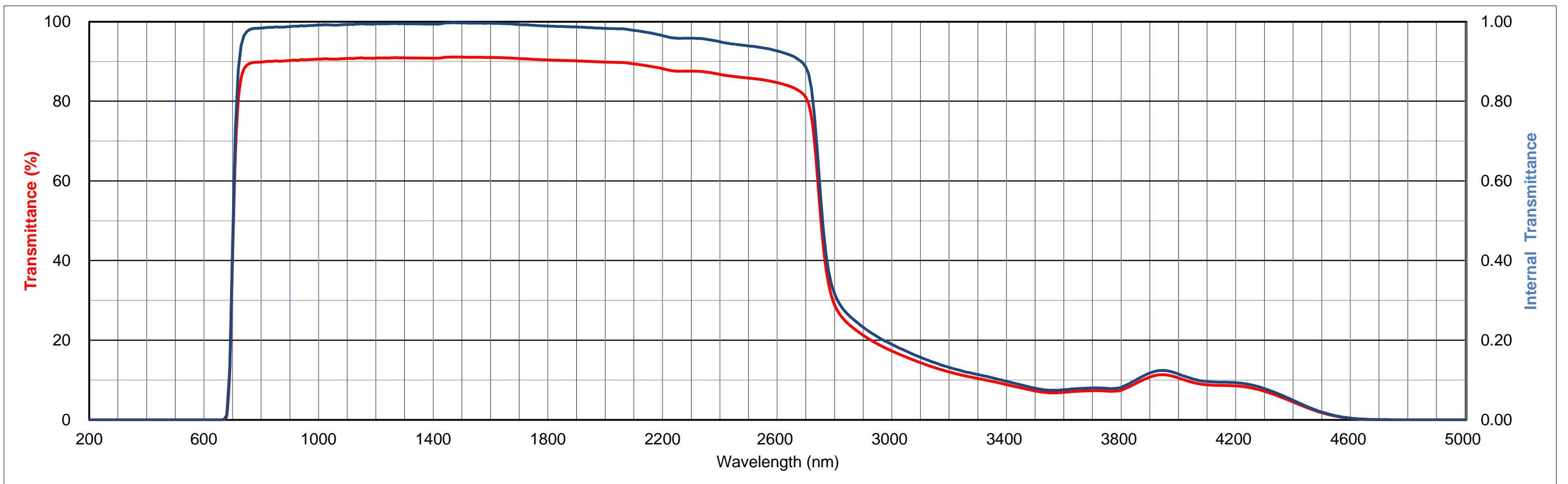
The content of this catalog is accurate as of April ,2014



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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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
λnm	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790
T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	12.0	40.9	67.1	80.3	85.8	88.1	89.0	89.5	89.7	89.8	89.8
λnm	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990
T	89.9	89.9	90.0	90.0	90.0	90.1	90.1	90.1	90.1	90.2	90.2	90.3	90.3	90.3	90.5	90.4	90.4	90.5	90.5	90.6
λnm	1000	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1110	1120	1130	1140	1150	1160	1170	1180	1190
T	90.6	90.6	90.7	90.7	90.6	90.6	90.6	90.6	90.7	90.7	90.7	90.7	90.8	90.7	90.8	90.8	90.9	90.8	90.8	90.8
λnm	1200	1210	1220	1230	1240	1250	1260	1270	1280	1290	1300	1310	1320	1330	1340	1350	1360	1370	1380	1390
T	90.8	90.9	90.9	90.9	90.8	90.9	90.9	91.0	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.8	90.8	90.8	90.8
λnm	1400	1410	1420	1430	1440	1450	1460	1470	1480	1490	1500	1510	1520	1530	1540	1550	1560	1570	1580	1590
T	90.8	90.8	90.8	90.9	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
λnm	1600	1610	1620	1630	1640	1650	1660	1670	1680	1690	1700	1710	1720	1730	1740	1750	1760	1770	1780	1790
T	91.0	91.0	91.0	91.0	90.9	90.9	90.9	90.9	90.8	90.8	90.7	90.7	90.7	90.6	90.6	90.5	90.5	90.5	90.4	90.4
λnm	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990
T	90.4	90.3	90.3	90.3	90.3	90.3	90.2	90.2	90.2	90.2	90.1	90.1	90.1	90.0	90.0	90.0	90.0	89.9	89.9	89.9
λnm	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950
T	89.8	89.7	89.4	88.9	88.2	87.6	87.6	87.4	86.8	86.2	85.8	85.4	84.7	83.6	81.0	52.4	29.0	24.0	21.2	19.1
λnm	3000	3050	3100	3150	3200	3250	3300	3350	3400	3450	3500	3550	3600	3650	3700	3750	3800	3850	3900	3950
T	17.3	15.8	14.4	13.1	12.0	11.1	10.4	9.7	8.9	8.0	7.3	6.8	6.9	7.2	7.3	7.2	7.4	9.1	10.7	11.3
λnm	4000	4050	4100	4150	4200	4250	4300	4350	4400	4450	4500	4550	4600	4650	4700	4750	4800	4850	4900	4950
T	10.5	9.4	8.8	8.6	8.5	8.1	7.2	5.9	4.5	3.0	1.8	0.9	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0
λnm	5000																			
T	0.0																			



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