

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
λnm	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990
T	1.3	5.6	18.3	41.4	63.1	77.0	83.3	86.0	87.2	87.9	88.2	88.5	88.6	88.8	88.8	88.9	89.0	89.1	89.1	89.2
λnm	1000	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1120	1140	1160	1180	1200				
T	89.2	89.3	89.3	89.4	89.3	89.4	89.4	89.5	89.5	89.6	89.6	89.6	89.6	89.7	89.7	89.8				

Refractive Index/Absorption coefficient/Reflection coefficient

λnm	400	500	600	700	800	900	1000
n	1.588	1.576	1.569	1.563	1.560	1.558	1.556
K	5.9E-03	4.4E-03	1.8E-03	1.5E-04	1.3E-04	3.0E-08	1.2E-13
P	0.902	0.905	0.906	0.908	0.909	0.909	0.910

Classes of Bubbles and Inclusions

Bubble Class
3

Color Specification

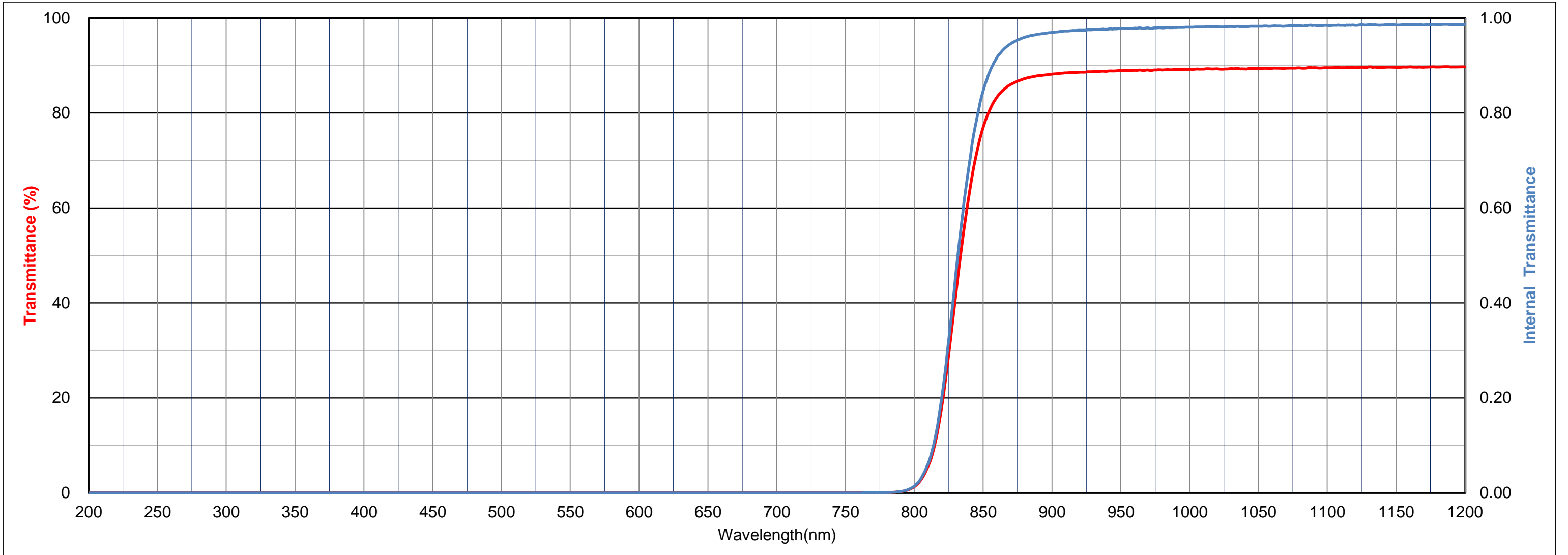
	x	y	Y	λ _d	P _e
A	-	-	-	-	-
C	-	-	-	-	-
D65	-	-	-	-	-

Properties

Chemical		Thermal				Mechanical		Others
D _w	D _A	T _g	T _s	α _{-30/70}	α _{100/300}	H _K	F _A	d
2	4	500	555	99	109	500	160	2.99

Tolerance of Transmittance (T)

λτ (nm)	Δλ (nm)
830±10	<60





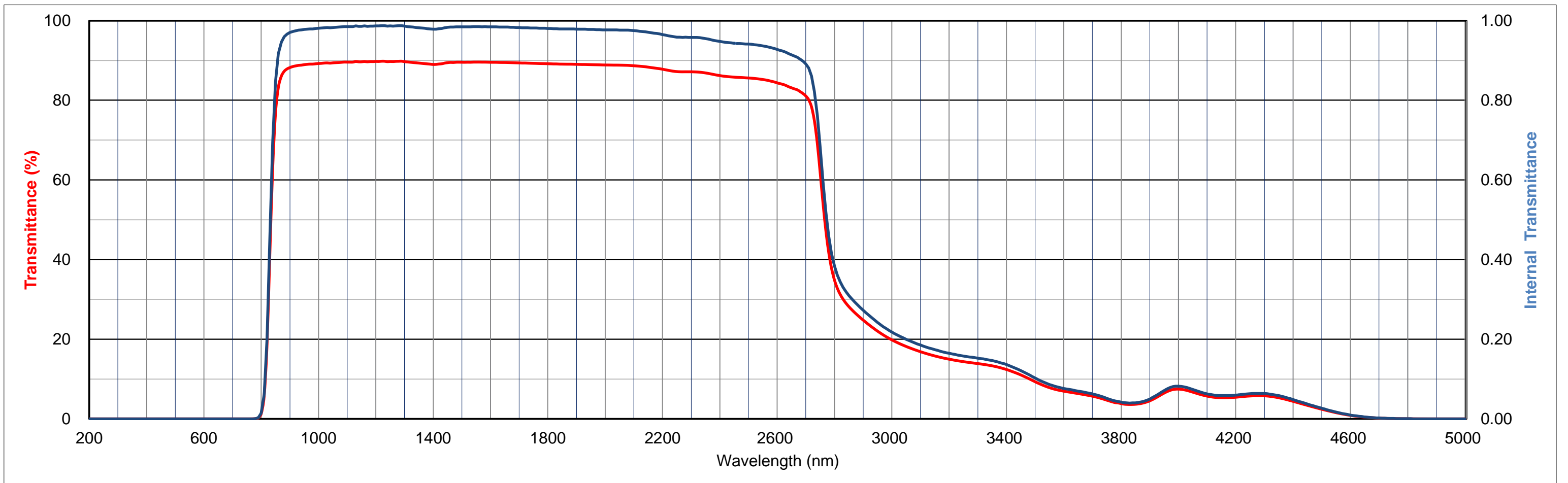
HOYA CANDEO OPTRONICS CORPORATION

Thickness 2.50 mm

IR83N

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
λnm	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990
T	1.3	5.6	18.3	41.4	63.1	77.0	83.3	86.0	87.2	87.9	88.2	88.5	88.6	88.8	88.8	88.9	89.0	89.1	89.1	89.2
λnm	1000	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1110	1120	1130	1140	1150	1160	1170	1180	1190
T	89.2	89.3	89.3	89.4	89.3	89.4	89.4	89.5	89.5	89.6	89.6	89.6	89.6	89.7	89.6	89.7	89.7	89.7	89.7	89.7
λnm	1200	1210	1220	1230	1240	1250	1260	1270	1280	1290	1300	1310	1320	1330	1340	1350	1360	1370	1380	1390
T	89.8	89.7	89.8	89.8	89.7	89.7	89.7	89.8	89.8	89.8	89.7	89.6	89.5	89.5	89.4	89.3	89.3	89.2	89.1	89.1
λnm	1400	1410	1420	1430	1440	1450	1460	1470	1480	1490	1500	1510	1520	1530	1540	1550	1560	1570	1580	1590
T	89.0	89.0	89.1	89.2	89.3	89.4	89.5	89.5	89.5	89.6	89.5	89.5	89.6	89.5	89.6	89.6	89.6	89.6	89.6	89.6
λnm	1600	1610	1620	1630	1640	1650	1660	1670	1680	1690	1700	1710	1720	1730	1740	1750	1760	1770	1780	1790
T	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.4	89.4	89.4	89.4	89.3	89.3	89.3	89.3	89.3	89.3	89.2	89.2	89.2
λnm	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990
T	89.2	89.2	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.0	89.0	89.0	89.0	89.0	89.0	88.9	88.9	88.9	88.9	88.9
λnm	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950
T	88.9	88.8	88.7	88.3	87.8	87.2	87.1	86.9	86.2	85.8	85.6	85.2	84.4	83.1	81.1	61.9	34.8	28.2	24.8	22.0
λnm	3000	3050	3100	3150	3200	3250	3300	3350	3400	3450	3500	3550	3600	3650	3700	3750	3800	3850	3900	3950
T	19.8	18.2	16.9	15.8	15.0	14.4	13.9	13.3	12.4	11.0	9.3	7.8	6.9	6.3	5.7	4.7	3.8	3.7	4.5	6.5
λnm	4000	4050	4100	4150	4200	4250	4300	4350	4400	4450	4500	4550	4600	4650	4700	4750	4800	4850	4900	4950
T	7.5	6.7	5.7	5.3	5.4	5.7	5.8	5.3	4.4	3.4	2.4	1.5	0.9	0.4	0.2	0.1	0.0	0.0	0.0	0.0
λnm	5000																			
T	0.0																			



All data is mean values of various melts.

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