



HOYA CANDEO OPTRONICS CORPORATION

Thickness 2.50 mm

HY1

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  | 1.7  | 11.5 | 23.9 | 44.8 | 71.2 | 81.0 | 85.5 | 86.1 | 84.7 | 84.6 | 36.3 | 83.2 | 87.6 | 87.6 |
| λnm | 400  | 410  | 420  | 430  | 440  | 450  | 460  | 470  | 480  | 490  | 500  | 510  | 520  | 530  | 540  | 550  | 560  | 570  | 580  | 590  |
| T   | 89.2 | 88.0 | 71.4 | 87.5 | 78.2 | 38.1 | 17.1 | 81.7 | 85.8 | 81.8 | 89.4 | 89.2 | 89.2 | 85.0 | 68.9 | 83.6 | 89.5 | 89.7 | 89.7 | 89.5 |
| λnm | 600  | 610  | 620  | 630  | 640  | 650  | 660  | 670  | 680  | 690  | 700  | 710  | 720  | 730  | 740  | 750  | 760  | 770  | 780  | 790  |
| T   | 89.5 | 89.5 | 89.0 | 85.5 | 75.1 | 78.4 | 83.8 | 88.7 | 89.5 | 89.8 | 89.8 | 89.8 | 89.7 | 89.7 | 89.6 | 89.7 | 89.6 | 89.5 | 89.5 | 89.6 |
| λnm | 800  | 810  | 820  | 830  | 840  | 850  | 860  | 870  | 880  | 890  | 900  | 910  | 920  | 930  | 940  | 950  | 960  | 970  | 980  | 990  |
| T   | 89.7 | 89.7 | 89.8 | 90.0 | 89.8 | 89.9 | 89.7 | 89.7 | 89.0 | 89.3 | 89.7 | 89.5 | 89.6 | 90.2 | 90.2 | 90.3 | 90.4 | 90.4 | 90.4 | 90.5 |
| λnm | 1000 | 1010 | 1020 | 1030 | 1040 | 1050 | 1060 | 1070 | 1080 | 1090 | 1100 | 1120 | 1140 | 1160 | 1180 | 1200 |      |      |      |      |
| T   | 90.5 | 90.5 | 90.5 | 90.6 | 90.6 | 90.5 | 90.6 | 90.6 | 90.6 | 90.5 | 90.4 | 88.9 | 86.2 | 88.1 | 87.8 | 87.5 |      |      |      |      |

Refractive Index/Absorption coefficient/Reflection coefficient

| λnm | 400   | 500   | 600   | 700   | 800   | 900   | 1000  |
|-----|-------|-------|-------|-------|-------|-------|-------|
| n   | 1.517 | 1.511 | 1.509 | 1.508 | 1.508 | 1.507 | 1.507 |
| P   | 0.919 | 0.920 | 0.921 | 0.921 | 0.921 | 0.921 | 0.921 |

Classes of Bubbles and Inclusions

| Bubble Class |
|--------------|
| 3            |

Color Specification

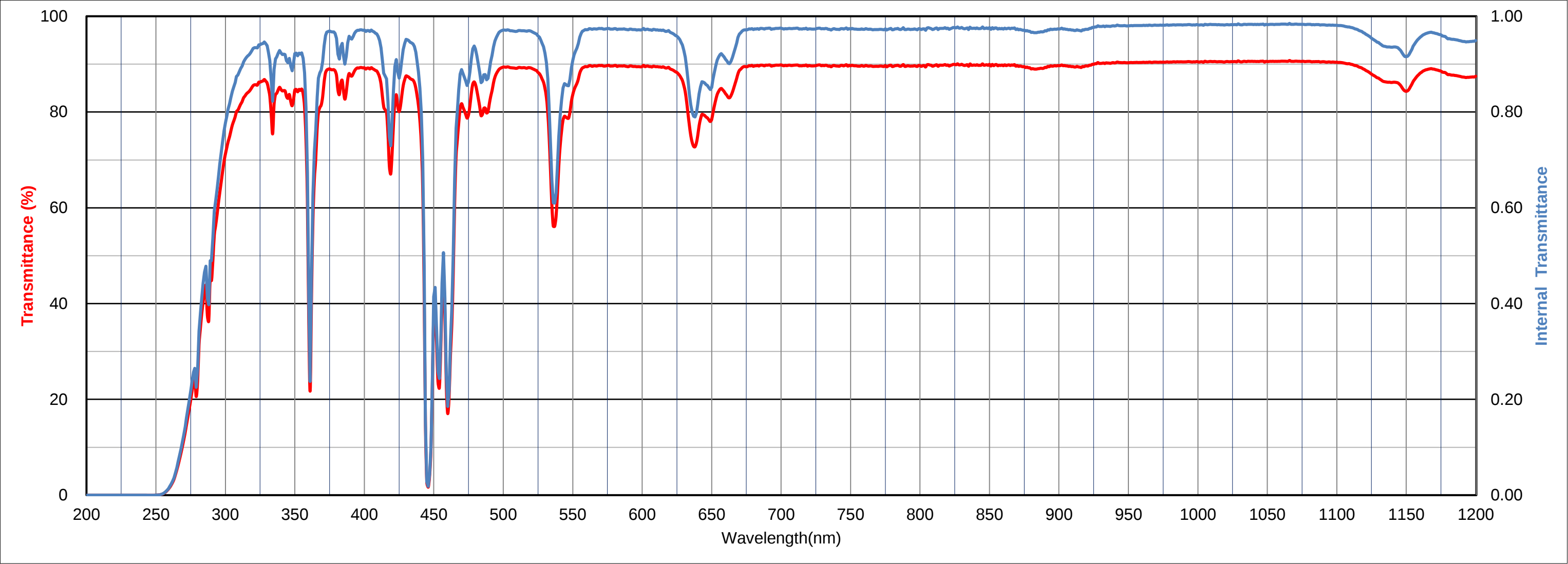
|     | x     | y     | Y  | λ <sub>d</sub> | P <sub>e</sub> |
|-----|-------|-------|----|----------------|----------------|
| A   | 0.465 | 0.425 | 86 | 581            | 24             |
| C   | 0.337 | 0.360 | 85 | 572            | 19             |
| D65 | 0.340 | 0.373 | 85 | 571            | 20             |

Properties

| Chemical       |                | Thermal        |                |                     |                      | Mechanical     |                | Others |
|----------------|----------------|----------------|----------------|---------------------|----------------------|----------------|----------------|--------|
| D <sub>W</sub> | D <sub>A</sub> | T <sub>g</sub> | T <sub>s</sub> | α <sub>-30/70</sub> | α <sub>100/300</sub> | H <sub>K</sub> | F <sub>A</sub> | d      |
| 4              | 1              | 590            | 640            | 102                 | 116                  | 520            | 130            | 2.72   |

Tolerance of Transmittance (T)

| Transmittance at 435nm | Transmittance at 445nm |
|------------------------|------------------------|
| T435(%)                | T445(%)                |
| >80                    | <5                     |



All data is mean values of various melts.

The content of this catalog is accurate as of January ,2025



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Thickness 2.50 mm

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| 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  | 1.7  | 11.5 | 23.9 | 44.8 | 71.2 | 81.0 | 85.5 | 86.1 | 84.7 | 84.6 | 36.3 | 83.2 | 87.6 | 87.6 |
| λnm               | 400  | 410      | 420  | 430  | 440  | 450  | 460  | 470  | 480  | 490  | 500  | 510  | 520  | 530  | 540  | 550  | 560  | 570  | 580  | 590  |
| T                 | 89.2 | 88.0     | 71.4 | 87.5 | 78.2 | 38.1 | 17.1 | 81.7 | 85.8 | 81.8 | 89.4 | 89.2 | 89.2 | 85.0 | 68.9 | 83.6 | 89.5 | 89.7 | 89.7 | 89.5 |
| λnm               | 600  | 610      | 620  | 630  | 640  | 650  | 660  | 670  | 680  | 690  | 700  | 710  | 720  | 730  | 740  | 750  | 760  | 770  | 780  | 790  |
| T                 | 89.5 | 89.5     | 89.0 | 85.5 | 75.1 | 78.4 | 83.8 | 88.7 | 89.5 | 89.8 | 89.8 | 89.8 | 89.7 | 89.7 | 89.6 | 89.7 | 89.6 | 89.5 | 89.5 | 89.6 |
| λnm               | 800  | 810      | 820  | 830  | 840  | 850  | 860  | 870  | 880  | 890  | 900  | 910  | 920  | 930  | 940  | 950  | 960  | 970  | 980  | 990  |
| T                 | 89.7 | 89.7     | 89.8 | 90.0 | 89.8 | 89.9 | 89.7 | 89.7 | 89.0 | 89.3 | 89.7 | 89.5 | 89.6 | 90.2 | 90.2 | 90.3 | 90.4 | 90.4 | 90.4 | 90.5 |
| λnm               | 1000 | 1010     | 1020 | 1030 | 1040 | 1050 | 1060 | 1070 | 1080 | 1090 | 1100 | 1110 | 1120 | 1130 | 1140 | 1150 | 1160 | 1170 | 1180 | 1190 |
| T                 | 90.5 | 90.5     | 90.5 | 90.6 | 90.6 | 90.5 | 90.6 | 90.6 | 90.6 | 90.5 | 90.4 | 90.0 | 88.9 | 87.1 | 86.2 | 84.3 | 88.1 | 89.0 | 87.8 | 87.3 |
| λnm               | 1200 | 1210     | 1220 | 1230 | 1240 | 1250 | 1260 | 1270 | 1280 | 1290 | 1300 | 1310 | 1320 | 1330 | 1340 | 1350 | 1360 | 1370 | 1380 | 1390 |
| T                 | 87.5 | 89.0     | 90.5 | 90.7 | 90.8 | 90.8 | 90.8 | 90.9 | 90.8 | 90.9 | 90.8 | 90.8 | 89.9 | 90.4 | 90.6 | 89.9 | 90.7 | 90.1 | 90.3 | 90.2 |
| λnm               | 1400 | 1410     | 1420 | 1430 | 1440 | 1450 | 1460 | 1470 | 1480 | 1490 | 1500 | 1510 | 1520 | 1530 | 1540 | 1550 | 1560 | 1570 | 1580 | 1590 |
| T                 | 90.2 | 90.1     | 90.2 | 90.3 | 90.2 | 90.3 | 89.9 | 90.2 | 90.0 | 89.8 | 89.9 | 90.0 | 89.9 | 89.9 | 89.9 | 89.7 | 89.7 | 89.8 | 89.7 | 89.8 |
| λnm               | 1600 | 1610     | 1620 | 1630 | 1640 | 1650 | 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | 1720 | 1730 | 1740 | 1750 | 1760 | 1770 | 1780 | 1790 |
| T                 | 89.6 | 89.6     | 89.7 | 89.6 | 89.7 | 89.5 | 89.4 | 89.5 | 89.4 | 89.2 | 89.5 | 89.3 | 89.2 | 89.1 | 89.2 | 89.0 | 89.0 | 88.9 | 88.7 | 88.6 |
| λnm               | 1800 | 1810     | 1820 | 1830 | 1840 | 1850 | 1860 | 1870 | 1880 | 1890 | 1900 | 1910 | 1920 | 1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 |
| T                 | 88.4 | 88.3     | 87.8 | 87.2 | 86.2 | 85.1 | 84.1 | 82.5 | 81.0 | 80.9 | 81.8 | 82.6 | 82.2 | 67.4 | 49.1 | 65.4 | 77.3 | 80.6 | 80.2 | 77.5 |
| λnm               | 2000 | 2050     | 2100 | 2150 | 2200 | 2250 | 2300 | 2350 | 2400 | 2450 | 2500 | 2550 | 2600 | 2650 | 2700 | 2750 | 2800 | 2850 | 2900 | 2950 |
| T                 | 74.4 | 82.1     | 85.6 | 87.6 | 87.3 | 87.0 | 87.0 | 86.6 | 86.2 | 85.8 | 85.4 | 85.1 | 84.5 | 84.0 | 82.4 | 66.6 | 52.4 | 50.5 | 49.9 | 49.0 |
| λnm               | 3000 | 3050     | 3100 | 3150 | 3200 | 3250 | 3300 | 3350 | 3400 | 3450 | 3500 | 3550 | 3600 | 3650 | 3700 | 3750 | 3800 | 3850 | 3900 | 3950 |
| T                 | 47.6 | 45.7     | 43.3 | 40.5 | 37.8 | 35.2 | 32.6 | 30.2 | 27.8 | 25.9 | 24.7 | 24.1 | 23.9 | 23.7 | 23.7 | 24.0 | 24.6 | 25.4 | 25.8 | 25.6 |
| λnm               | 4000 | 4050     | 4100 | 4150 | 4200 | 4250 | 4300 | 4350 | 4400 | 4450 | 4500 | 4550 | 4600 | 4650 | 4700 | 4750 | 4800 | 4850 | 4900 | 4950 |
| T                 | 24.6 | 22.9     | 20.8 | 18.5 | 16.2 | 13.9 | 11.4 | 8.5  | 5.6  | 3.1  | 1.4  | 0.5  | 0.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| λnm               | 5000 |          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| T                 | 0.0  |          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

