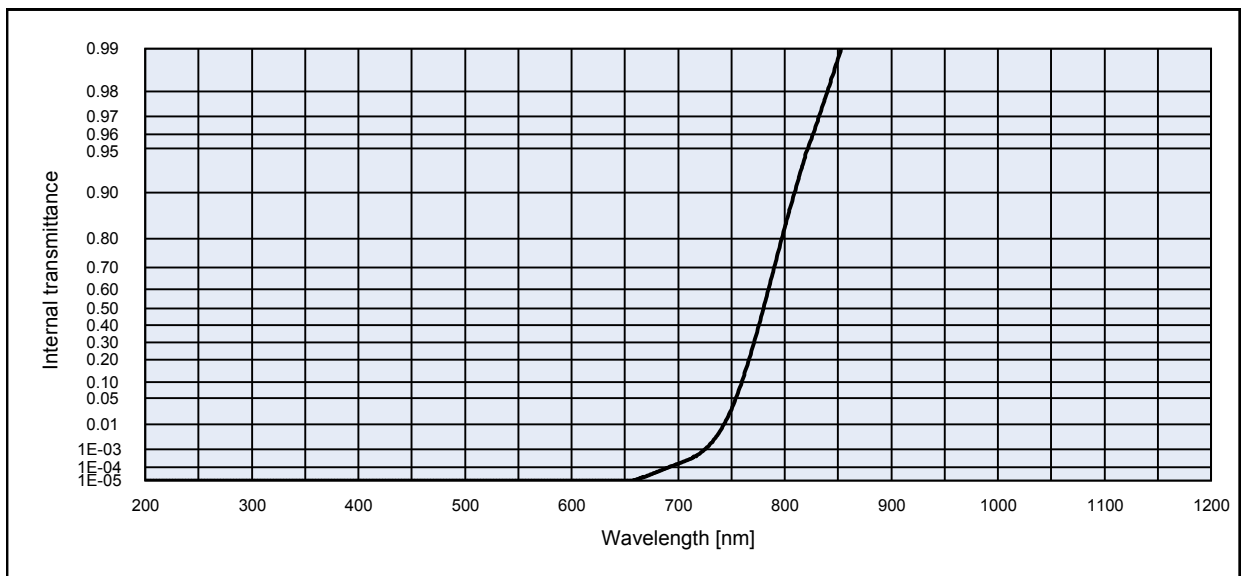


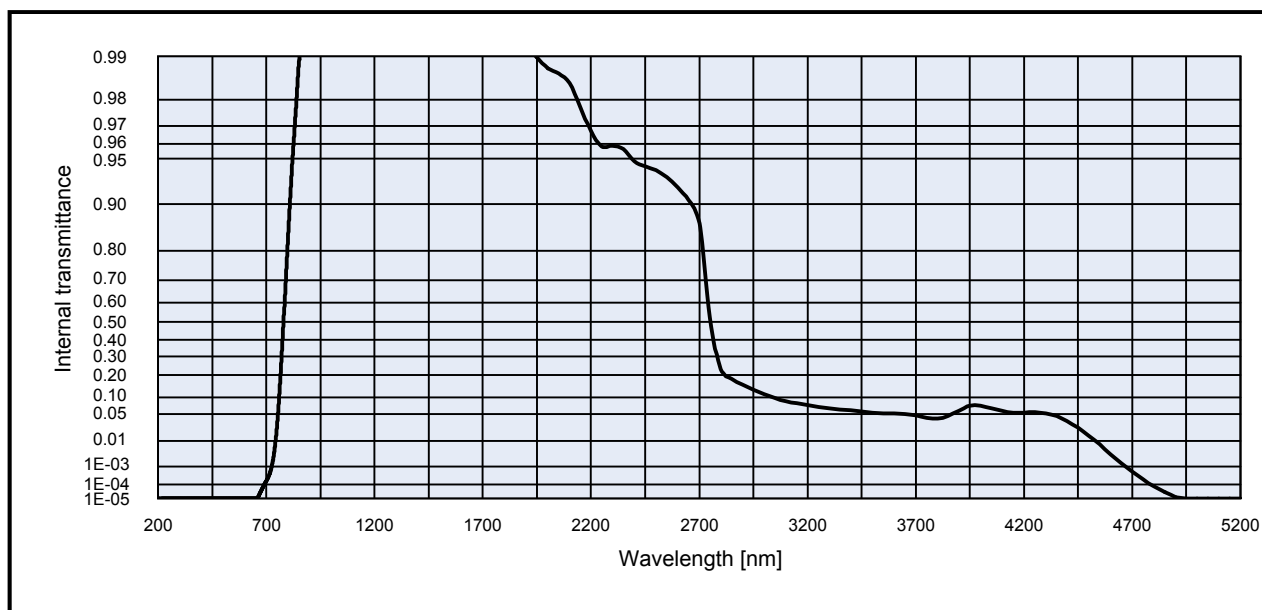
Data Sheet



| | | | | | |
|--|---------|--|--|---|--|
| RG780 | | Density ρ [g/cm ³] 2.94 | | Notes Colloidally colored glass Long pass filter | |
| Reflection factor P_d 0.91 | | Bubble content Bubble class 3 | | | |
| Reference thickness d [mm] 3 | | Chemical resistance FR class 5 SR class 53.4 AR class 1.3 | | | |
| Spectral values guaranteed λ_c ($\tau_i = 0.50$) [nm] = 780 \pm 9 λ_s ($\tau_{is} = 1 \cdot 10^{-5}$) [nm] = 610 λ_p ($\tau_{ip} = 0.97$) [nm] = 900 | | Transformation temperature T_g [°C] 552 | | | |
| | | Thermal expansion $\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/\text{K}$] 9.5 $\alpha_{20/300^\circ\text{C}}$ [$10^{-6}/\text{K}$] 10.5 $\alpha_{20/200^\circ\text{C}}$ [$10^{-6}/\text{K}$] | | | |
| Refractive index n | | Temperature coefficient T_k [nm/°C] 0.22 | | All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed". | |
| λ [nm] | Element | n | | | |
| 587.6 | He | 1.56 | | | |
| 852.1 | Cs | 1.56 | | | |
| 1014 | Hg | 1.55 | | | |

| Colorimetric evaluation | | | | | | | | | | | |
|-------------------------|-------------------------|---|---|------------------|-------------------|---|---|------------------|---------------------------------|---|---|
| Illuminant | A (Planck T = 2856 K) | | | Illuminant | Planck T = 3200 K | | | Illuminant | D65 (T _c = 6504 K) | | |
| d [mm] | 1 | 2 | 3 | d [mm] | 1 | 2 | 3 | d [mm] | 1 | 2 | 3 |
| x | | | | x | | | | x | | | |
| y | | | | y | | | | y | | | |
| Y | | | | Y | | | | Y | | | |
| λ_d [nm] | | | | λ_d [nm] | | | | λ_d [nm] | | | |
| P_e | | | | P_e | | | | P_e | | | |





Internal transmittance τ_i at reference thickness d [mm] = 3
The internal transmittance values, tabulated and graphically represented, are reference values only

| λ [nm] | τ_i | λ [nm] | τ_i | λ [nm] | τ_i | λ [nm] | τ_i | λ [nm] | τ_i | λ [nm] | τ_i |
|----------------|-----------|----------------|-----------|----------------|----------|----------------|----------|----------------|----------|----------------|-----------|
| 200 | < 1.0E-05 | 500 | < 1.0E-05 | 800 | 8.3E-01 | 1100 | 1.0E+00 | 2200 | 9.7E-01 | 3700 | 4.6E-02 |
| 210 | < 1.0E-05 | 510 | < 1.0E-05 | 810 | 9.0E-01 | 1110 | 1.0E+00 | 2250 | 9.6E-01 | 3750 | 4.1E-02 |
| 220 | < 1.0E-05 | 520 | < 1.0E-05 | 820 | 9.5E-01 | 1120 | 1.0E+00 | 2300 | 9.6E-01 | 3800 | 4.0E-02 |
| 230 | < 1.0E-05 | 530 | < 1.0E-05 | 830 | 9.7E-01 | 1130 | 1.0E+00 | 2350 | 9.6E-01 | 3850 | 4.6E-02 |
| 240 | < 1.0E-05 | 540 | < 1.0E-05 | 840 | 9.8E-01 | 1140 | 1.0E+00 | 2400 | 9.5E-01 | 3900 | 5.7E-02 |
| 250 | < 1.0E-05 | 550 | < 1.0E-05 | 850 | 9.9E-01 | 1150 | 1.0E+00 | 2450 | 9.4E-01 | 3950 | 7.3E-02 |
| 260 | < 1.0E-05 | 560 | < 1.0E-05 | 860 | 9.9E-01 | 1160 | 1.0E+00 | 2500 | 9.4E-01 | 4000 | 7.3E-02 |
| 270 | < 1.0E-05 | 570 | < 1.0E-05 | 870 | 1.0E+00 | 1170 | 1.0E+00 | 2550 | 9.3E-01 | 4050 | 6.6E-02 |
| 280 | < 1.0E-05 | 580 | < 1.0E-05 | 880 | 1.0E+00 | 1180 | 1.0E+00 | 2600 | 9.2E-01 | 4100 | 5.7E-02 |
| 290 | < 1.0E-05 | 590 | < 1.0E-05 | 890 | 1.0E+00 | 1190 | 1.0E+00 | 2650 | 9.1E-01 | 4150 | 5.2E-02 |
| 300 | < 1.0E-05 | 600 | < 1.0E-05 | 900 | 1.0E+00 | 1200 | 1.0E+00 | 2700 | 8.7E-01 | 4200 | 5.4E-02 |
| 310 | < 1.0E-05 | 610 | < 1.0E-05 | 910 | 1.0E+00 | 1250 | 1.0E+00 | 2750 | 5.3E-01 | 4250 | 5.4E-02 |
| 320 | < 1.0E-05 | 620 | < 1.0E-05 | 920 | 1.0E+00 | 1300 | 1.0E+00 | 2800 | 2.3E-01 | 4300 | 5.2E-02 |
| 330 | < 1.0E-05 | 630 | < 1.0E-05 | 930 | 1.0E+00 | 1350 | 1.0E+00 | 2850 | 1.8E-01 | 4350 | 4.5E-02 |
| 340 | < 1.0E-05 | 640 | < 1.0E-05 | 940 | 1.0E+00 | 1400 | 1.0E+00 | 2900 | 1.5E-01 | 4400 | 3.5E-02 |
| 350 | < 1.0E-05 | 650 | < 1.0E-05 | 950 | 1.0E+00 | 1450 | 1.0E+00 | 2950 | 1.3E-01 | 4450 | 2.4E-02 |
| 360 | < 1.0E-05 | 660 | 1.2E-05 | 960 | 1.0E+00 | 1500 | 1.0E+00 | 3000 | 1.1E-01 | 4500 | 1.5E-02 |
| 370 | < 1.0E-05 | 670 | 2.3E-05 | 970 | 1.0E+00 | 1550 | 1.0E+00 | 3050 | 9.8E-02 | 4550 | 8.0E-03 |
| 380 | < 1.0E-05 | 680 | 4.6E-05 | 980 | 1.0E+00 | 1600 | 1.0E+00 | 3100 | 8.8E-02 | 4600 | 3.4E-03 |
| 390 | < 1.0E-05 | 690 | 9.0E-05 | 990 | 1.0E+00 | 1650 | 1.0E+00 | 3150 | 8.0E-02 | 4650 | 1.4E-03 |
| 400 | < 1.0E-05 | 700 | 1.6E-04 | 1000 | 1.0E+00 | 1700 | 1.0E+00 | 3200 | 7.4E-02 | 4700 | 5.5E-04 |
| 410 | < 1.0E-05 | 710 | 2.9E-04 | 1010 | 1.0E+00 | 1750 | 1.0E+00 | 3250 | 6.9E-02 | 4750 | 2.0E-04 |
| 420 | < 1.0E-05 | 720 | 6.0E-04 | 1020 | 1.0E+00 | 1800 | 9.9E-01 | 3300 | 6.5E-02 | 4800 | 7.4E-05 |
| 430 | < 1.0E-05 | 730 | 1.7E-03 | 1030 | 1.0E+00 | 1850 | 9.9E-01 | 3350 | 6.2E-02 | 4850 | 3.0E-05 |
| 440 | < 1.0E-05 | 740 | 6.4E-03 | 1040 | 1.0E+00 | 1900 | 9.9E-01 | 3400 | 5.9E-02 | 4900 | 1.2E-05 |
| 450 | < 1.0E-05 | 750 | 2.7E-02 | 1050 | 1.0E+00 | 1950 | 9.9E-01 | 3450 | 5.6E-02 | 4950 | < 1.0E-05 |
| 460 | < 1.0E-05 | 760 | 1.0E-01 | 1060 | 1.0E+00 | 2000 | 9.9E-01 | 3500 | 5.4E-02 | 5000 | < 1.0E-05 |
| 470 | < 1.0E-05 | 770 | 2.7E-01 | 1070 | 1.0E+00 | 2050 | 9.9E-01 | 3550 | 5.2E-02 | 5050 | < 1.0E-05 |
| 480 | < 1.0E-05 | 780 | 5.0E-01 | 1080 | 1.0E+00 | 2100 | 9.8E-01 | 3600 | 5.2E-02 | 5100 | < 1.0E-05 |
| 490 | < 1.0E-05 | 790 | 7.0E-01 | 1090 | 1.0E+00 | 2150 | 9.8E-01 | 3650 | 5.1E-02 | 5150 | < 1.0E-05 |