| D-ZK21-25 | 623581 | $n_d$ = 1.623460 | $\upsilon_d$ = 58.12 | $n_F - n_C$ = 0.010728 |
|---|---|---|---|---|
| | | $n_e$ = 1.626018 | $\upsilon_e$ = 57.91 | $n_{F'} - n_{C'}$ = 0.010811 |

**折射率 Refractive Index****

| | λ（nm） | |
|---|---|---|
| $n_{2325.42}$ | 2325.42 | 1.588781 |
| $n_{1970.09}$ | 1970.09 | 1.595773 |
| $n_{1529.58}$ | 1529.58 | 1.603071 |
| $n_{1060.0}$ | 1060.0 | 1.610275 |
| $n_t$ | 1013.98 | 1.611063 |
| $n_s$ | 852.11 | 1.614265 |
| $n_r$ | 706.52 | 1.618295 |
| $n_C$ | 656.27 | 1.620178 |
| $n_{C'}$ | 643.85 | 1.620703 |
| $n_{He-Ne}$ | 632.8 | 1.621192 |
| $n_D$ | 589.29 | 1.623364 |
| $n_d$ | 587.56 | 1.623460 |
| $n_e$ | 546.07 | 1.626018 |
| $n_F$ | 486.13 | 1.630906 |
| $n_{F'}$ | 479.99 | 1.631514 |
| $n_g$ | 435.83 | 1.636700 |
| $n_h$ | 404.66 | 1.641501 |
| $n_i$ | 365.01 | 1.649672 |
| $n_{313.18}$ | 313.18 | 1.666253 |
| $n_{302.15}$ | 302.15 | 1.671156 |

**色散公式常数 Constants of Dispersion Formula**

| | |
|---|---|
| $K_1$ | 1.08777542E+00 |
| $L_1$ | 1.43531981E-02 |
| $K_2$ | 5.05694645E-01 |
| $L_2$ | -4.48862561E-04 |
| $K_3$ | 1.31533152E+00 |
| $L_3$ | 1.04063333E+02 |

**折射率温度系数常数 Constants of dn/dt**

| | |
|---|---|
| $D_0$ | 4.26E-06 |
| $D_1$ | 1.53E-08 |
| $D_2$ | -2.43E-11 |
| $E_0$ | 4.86E-07 |
| $E_1$ | 2.51E-10 |
| $\lambda_{TK}$(μm) | 0.199 |

**相对部分色散 Relative Partial Dispersions**

| | | | |
|---|---|---|---|
| $P_{s,t}$ | 0.2985 | $P'_{s,t}$ | 0.2962 |
| $P_{C,s}$ | 0.5512 | $P'_{C',s}$ | 0.5955 |
| $P_{d,C}$ | 0.3059 | $P'_{d,C'}$ | 0.2550 |
| $P_{e,d}$ | 0.2384 | $P'_{e,d}$ | 0.2366 |
| $P_{g,F}$ | 0.5401 | $P'_{g,F'}$ | 0.4797 |
| $P_{i,h}$ | 0.7617 | $P'_{i,h}$ | 0.7558 |

**异常色散 Abnormal Dispersions**

| | | | |
|---|---|---|---|
| $\Delta P_{C,t}$ | 0.0295 | $\Delta P_{C,s}$ | 0.0120 |
| $\Delta P_{F,e}$ | -0.0023 | $\Delta P_{g,F}$ | -0.0066 |

**着色度 Color Code**

| | |
|---|---|
| $\lambda_{80}/\lambda_5$ | 340/260 |
| $\lambda_{70}/\lambda_5$ | |

**热性质 Thermal Properties**

| | |
|---|---|
| $T_g$ (℃) | 541 |
| $T_s$ (℃) | 572 |
| $T_{10}^{14.5}$ (℃) | 487 |
| $T_{10}^{13}$ (℃) | 518 |
| $T_{10}^{7.6}$(℃) | 636 |
| $\alpha_{-30/70℃}$($10^{-7}$/K) | 61 |
| $\alpha_{100/300℃}$($10^{-7}$/K) | 84 |
| λ[W/(m·K)] | |

**化学性质 Chemical Properties**

| | Grade |
|---|---|
| $D_W$ | 2 |
| $D_A$ | 3 |
| CR | 1 |
| RC(S) | 2 |
| RA(S) | 5 |

**内部透过率 Internal Transmittance τ**

| λ（nm） | τ (5mm) | τ (10mm) |
|---|---|---|
| 2400 | 0.845 | 0.714 |
| 2200 | 0.956 | 0.913 |
| 2000 | 0.986 | 0.972 |
| 1800 | 0.994 | 0.989 |
| 1600 | 0.998 | 0.995 |
| 1400 | 0.997 | 0.994 |
| 1200 | 0.999 | 0.998 |
| 1060 | 0.999 | 0.998 |
| 1000 | 0.999 | 0.998 |
| 950 | 0.999 | 0.998 |
| 900 | 0.999 | 0.998 |
| 850 | 0.999 | 0.998 |
| 800 | 0.999 | 0.998 |
| 700 | 0.999 | 0.998 |
| 650 | 0.999 | 0.998 |
| 600 | 0.998 | 0.997 |
| 550 | 0.998 | 0.997 |
| 500 | 0.998 | 0.997 |
| 480 | 0.998 | 0.997 |
| 460 | 0.998 | 0.997 |
| 440 | 0.998 | 0.996 |
| 420 | 0.997 | 0.995 |
| 400 | 0.997 | 0.994 |
| 390 | 0.996 | 0.993 |
| 380 | 0.995 | 0.990 |
| 370 | 0.991 | 0.983 |
| 360 | 0.985 | 0.970 |
| 350 | 0.971 | 0.943 |
| 340 | 0.949 | 0.900 |
| 330 | 0.912 | 0.831 |
| 320 | 0.855 | 0.731 |
| 310 | 0.774 | 0.599 |
| 300 | 0.673 | 0.453 |
| 290 | 0.562 | 0.316 |
| 280 | 0.457 | 0.209 |

**折射率温度系数 Temperature Coefficients of Refractive Index**

| 温度范围（℃） Range of Temperature | dn/dt relative($10^{-6}$/℃) | | | | | |
|---|---|---|---|---|---|---|
| | t | C′ | d | e | F′ | g |
| -60～-40 | 3.8 | 4.2 | 4.4 | 4.5 | 4.8 | 5.1 |
| -40～-20 | 3.7 | 4.1 | 4.3 | 4.4 | 4.8 | 5.0 |
| -20～0 | 3.7 | 4.1 | 4.3 | 4.5 | 4.8 | 5.3 |
| 0～20 | 3.7 | 4.3 | 4.4 | 4.5 | 4.8 | 5.4 |
| 20～40 | 3.8 | 4.4 | 4.6 | 4.7 | 5.1 | 5.4 |
| 40～60 | 4.1 | 4.6 | 4.7 | 4.9 | 5.2 | 5.7 |
| 60～80 | 4.2 | 4.6 | 4.8 | 5.0 | 5.3 | 5.7 |
| 80～100 | 4.2 | 4.7 | 4.8 | 5.1 | 5.5 | 5.9 |
| 100～120 | 4.3 | 4.7 | 4.9 | 5.2 | 5.8 | 6.1 |
| 120～140 | 4.3 | 4.9 | 5.1 | 5.2 | 5.8 | 6.1 |

**机械性质 Mechanical Properties**

| | |
|---|---|
| $H_K$ ($10^7$Pa) | 635 |
| $F_A$ | 126 |
| E ($10^7$Pa) | 10618 |
| G ($10^7$Pa) | 4197 |
| μ | 0.265 |
| B ($10^{-12}$/Pa) | 2.26 |

**其他性质 Other Properties**

| | |
|---|---|
| ρ (g/cm$^3$) | 2.99 |

**备注 Remarks**

**:退火速率 anneal rate 25℃/h

CDGM