

J-SSK8

$n_d = 1.617720$

$n_e = 1.620669$

$v_d = 49.81$

$v_e = 49.53$

| | |
|----------------|--------|
| Glass code (d) | 618498 |
| Glass code (e) | 621495 |

| Spectral l. | Refractive idx |
|-------------|----------------|
| 2.058 | 1.58991 |
| 1.970 | 1.59120 |
| 1.530 | 1.59714 |
| 1.129 | 1.60250 |
| 1.064 | 1.60349 |
| t | 1.60432 |
| s | 1.60756 |
| A' | 1.609817 |
| r | 1.611903 |
| C | 1.613998 |
| C' | 1.614587 |
| He-Ne | 1.615138 |
| D | 1.617610 |
| d | 1.617720 |
| e | 1.620669 |
| F | 1.626399 |
| F' | 1.627119 |
| g | 1.633338 |
| h | 1.639220 |
| 0.389 | 1.642869 |
| i | 1.649551 |

| Coef. disp. form. (pwr ser.) | |
|------------------------------|-----------------|
| A0 | 2.56658096E+00 |
| A1 | -9.72847347E-03 |
| A2 | -9.45439785E-05 |
| A3 | 1.74935076E-02 |
| A4 | 3.71433240E-04 |
| A5 | -4.00752907E-06 |
| A6 | 1.64198401E-06 |
| A7 | 0.00000000E+00 |
| A8 | 0.00000000E+00 |

| Partial dispersion | |
|--------------------|----------|
| F-C | 0.012401 |
| F'-C' | 0.012532 |
| C-t | 0.009678 |
| C-A' | 0.004181 |
| d-C | 0.003722 |
| e-C | 0.006671 |
| g-d | 0.015618 |
| g-F | 0.006939 |
| h-g | 0.005882 |
| i-g | 0.016213 |
| C'-t | 0.010267 |
| e-C' | 0.006082 |
| F'-e | 0.006450 |
| i-F' | 0.022432 |

| Relative partial dispersion | |
|-----------------------------|--------|
| C-t/F-C | 0.7804 |
| C-A'/F-C | 0.3372 |
| d-C/F-C | 0.3001 |
| e-C/F-C | 0.5379 |
| g-d/F-C | 1.2594 |
| g-F/F-C | 0.5596 |
| h-g/F-C | 0.4743 |
| i-g/F-C | 1.3074 |
| C'-t/F'-C' | 0.8193 |
| e-C'/F'-C' | 0.4853 |
| F'-e/F'-C' | 0.5147 |
| i-F'/F'-C' | 1.7900 |

| Deviation of relative partial disp. | |
|-------------------------------------|---------|
| ΔPdC | 0.0004 |
| ΔPgF | -0.0012 |

| Internal CC (80%/5%) | |
|----------------------|--|
| 372/340 | |

| Color Code (80%/5%) | |
|---------------------|--|
| 385/340 | |

| CCI | |
|-----|------|
| B | 0.00 |
| G | 0.78 |
| R | 0.75 |

| Thermal properties | |
|--------------------------|-------|
| CTE(-30,70) [1E-7/°C] | 74 |
| CTE(100,300) [1E-7/°C] | 89 |
| Tg [°C] | 593 |
| At [°C] | 639 |
| Ht condct. [W/m·K] | 0.979 |
| Sp. heat [kJ/kg·K] | 0.626 |
| Ht diffus. [1E-6 m2/sec] | 0.492 |

| Chemical properties [class] | |
|-----------------------------|---|
| Acid res. (surface) | 6 |
| Alkaline detergent res. | 3 |
| Climate resistance | 2 |
| Water res. (powder) | 2 |
| Acid res. (powder) | 3 |

| Mechanical properties | |
|--------------------------------------|---------|
| Knoop hardness | 493 (5) |
| Abrasion hardness | 129 |
| Young's mod. [GPa] | 85.6 |
| Shear mod. [GPa] | 34.0 |
| Poisson's ratio | 0.260 |
| Stress optical coef. [1E-5 nm/cm/Pa] | 2.37 |

| Internal trans. (10mm) | |
|------------------------|--------|
| λ [nm] | τ |
| 280 | 0.00 |
| 290 | 0.00 |
| 300 | 0.00 |
| 310 | 0.00 |
| 320 | 0.00 |
| 330 | 0.00 |
| 340 | 0.05 |
| 350 | 0.25 |
| 360 | 0.54 |
| 370 | 0.76 |
| 380 | 0.88 |
| 390 | 0.935 |
| 400 | 0.962 |
| 420 | 0.982 |
| 440 | 0.987 |
| 460 | 0.990 |
| 480 | 0.993 |
| 500 | 0.995 |
| 550 | 0.998 |
| 600 | 0.998 |
| 650 | 0.997 |
| 700 | 0.997 |
| 800 | 0.997 |
| 900 | 0.997 |
| 1000 | 0.997 |
| 1200 | 0.997 |
| 1400 | 0.989 |
| 1600 | 0.989 |
| 1800 | 0.977 |
| 2000 | 0.961 |
| 2200 | 0.902 |
| 2400 | 0.83 |

| Specific gravity | |
|------------------|--|
| 3.18 | |

| Relative $\Delta n / \Delta T$ [1E-6/°C] | | | | | | | | | | | | | | | |
|--|-------|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-------|
| Temp. [°C] | 1.083 | t | s | A' | r | C | C' | He-Ne | d | e | F | F' | g | h | 0.389 |
| 80 to 90 (ref.) | 2.1 | 2.1 | 2.2 | 2.4 | 2.5 | 2.7 | 2.7 | 2.7 | 2.9 | 3.1 | 3.6 | 3.6 | 4.1 | 4.7 | 5.0 |
| 60 to 80 (ref.) | 1.9 | 2.0 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.6 | 2.8 | 3.0 | 3.4 | 3.5 | 4.0 | 4.5 | 4.8 |
| 40 to 60 | 1.8 | 1.8 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.4 | 2.6 | 2.8 | 3.2 | 3.2 | 3.7 | 4.2 | 4.6 |
| 20 to 40 | 1.6 | 1.7 | 1.8 | 1.9 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 | 2.6 | 3.0 | 3.1 | 3.5 | 4.0 | 4.4 |
| 0 to 20 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.1 | 2.1 | 2.1 | 2.3 | 2.5 | 2.9 | 2.9 | 3.4 | 3.9 | 4.2 |
| -20 to 0 | 1.5 | 1.5 | 1.7 | 1.8 | 1.9 | 2.0 | 2.0 | 2.1 | 2.2 | 2.4 | 2.8 | 2.8 | 3.3 | 3.7 | 4.1 |
| -40 to -20 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.0 | 2.1 | 2.2 | 2.4 | 2.8 | 2.8 | 3.2 | 3.7 | 4.0 |
| -60 to -40 (ref.) | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.5 | 2.8 | 2.9 | 3.3 | 3.7 | 4.0 |
| -70 to -60 (ref.) | 1.8 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.4 | 2.6 | 3.0 | 3.0 | 3.4 | 3.9 | 4.2 |

| Absolute $\Delta n / \Delta T$ [1E-6/°C] | | | | | | | | | | | | | | | |
|--|-------|------|------|------|------|------|------|-------|------|------|------|-----|-----|-----|-------|
| Temp. [°C] | 1.083 | t | s | A' | r | C | C' | He-Ne | d | e | F | F' | g | h | 0.389 |
| 80 to 90 | 1.1 | 1.1 | 1.3 | 1.4 | 1.5 | 1.7 | 1.7 | 1.7 | 1.9 | 2.1 | 2.5 | 2.6 | 3.1 | 3.6 | 4.0 |
| 60 to 80 | 0.9 | 0.9 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.5 | 1.7 | 1.9 | 2.3 | 2.3 | 2.8 | 3.3 | 3.7 |
| 40 to 60 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.3 | 1.5 | 1.9 | 2.0 | 2.5 | 3.0 | 3.3 |
| 20 to 40 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 1.0 | 1.2 | 1.6 | 1.6 | 2.1 | 2.6 | 2.9 |
| 0 to 20 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.3 | 1.7 | 2.2 | 2.5 |
| -20 to 0 | -0.3 | -0.3 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.5 | 0.9 | 0.9 | 1.4 | 1.8 | 2.1 |
| -40 to -20 | -0.6 | -0.6 | -0.5 | -0.4 | -0.3 | -0.2 | -0.2 | -0.1 | 0.0 | 0.2 | 0.5 | 0.6 | 1.0 | 1.4 | 1.7 |
| -60 to -40 | -0.9 | -0.9 | -0.8 | -0.7 | -0.6 | -0.5 | -0.5 | -0.5 | -0.3 | -0.2 | 0.2 | 0.2 | 0.6 | 1.0 | 1.3 |
| -70 to -60 | -1.2 | -1.1 | -1.0 | -0.9 | -0.8 | -0.8 | -0.7 | -0.7 | -0.6 | -0.4 | -0.1 | 0.0 | 0.4 | 0.8 | 1.0 |

| Coef. disp. form. (frac. eq.) (ref.) | |
|--------------------------------------|----------------|
| P1 | 1.14440812E-01 |
| Q1 | 8.22577070E+01 |
| P2 | 8.67672536E-03 |
| Q2 | 4.88531477E-02 |
| P3 | 3.34364724E-01 |
| Q3 | 6.32531622E-03 |

| Fitting error of disp. form. σ [1E-6] | | |
|--|---------|----------|
| | Visible | Infrared |
| Power ser. eq. | 0.9 | 6.8 |
| Frac. eq. (ref.) | 0.7 | 7.6 |

| | |
|----------------------|---|
| Prod. Freq. (A to D) | C |
|----------------------|---|

| Similar glass type | | | |
|--------------------|---------|--------|--------|
| OHARA | S-BSM28 | HOYA | - |
| CDGM | - | SCHOTT | N-SSK8 |

| | |
|----------|---------------|
| 2019-4-1 | Transmittance |
| 2018-4-1 | Prod. Freq. |
| 2015-4-1 | Color Code |