J-K3

n_d = 1.518230 n_e = 1.520330

ν_d = 58.82 ν_e = 58.55

Glass code (d)
518588
Glass code (e)
520586

Spectral l.	Refractive idx
2.058	1.49627
1.970	1.49739
1.530	1.50247
1.129	1.50688
1.064	1.50767
t	1.50832
s	1.51081
A'	1.512490
r	1.514026
C	1.515551
C'	1.515978
He-Ne	1.516375
D	1.518152
d	1.518230
e	1.520330
F	1.524362
F'	1.524865
g	1.529163
h	1.533159
0.389	1.535601
i	1.539996

Coef. disp. form. (pwr ser.)	
A0	2.27169182E+00
A1	-8.15289465E-03
A2	-6.46337623E-05
A3	1.19516164E-02
A4	1.76673730E-04
A5	1.45062194E-06
A6	2.24852090E-07
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.008811
F'-C'	0.008887
C-t	0.007229
C-A'	0.003061
d-C	0.002679
e-C	0.004779
g-d	0.010933
g-F	0.004801
h-g	0.003996
i-g	0.010833
C'-t	0.007656
e-C'	0.004352
F'-e	0.004535
i-F'	0.015131

Relative partial dispersion	
C-t／F-C	0.8205
C-A'／F-C	0.3474
d-C／F-C	0.3041
e-C／F-C	0.5424
g-d／F-C	1.2408
g-F／F-C	0.5449
h-g／F-C	0.4535
i-g／F-C	1.2295
C'-t／F'-C'	0.8615
e-C'／F'-C'	0.4897
F'-e／F'-C'	0.5103
i-F'／F'-C'	1.7026

Deviation of relative partial disp.	
ΔPdC	0.0003
ΔPgF	−0.0008

Internal CC (80%/5%)
340/310
Color Code (80%/5%)
345/310

CCI	
B	0.00
G	0.06
R	0.03

Thermal properties	
CTE(−30,70) [1E-7/℃]	89
CTE(100,300) [1E-7/℃]	111
Tg [℃]	508
At [℃]	559
StP [℃]	456
AP [℃]	499
SP [℃]	683
Ht cndct. [W/m･K]	1.020
Sp. heat [kJ/kg･K]	0.771
Ht diffus. [1E-6 m2/sec]	0.527

Chemical properties [class]	
Acid res. (surface)	1
Alkaline detergent res.	1
Climate resistance	2
Water res. (powder)	3
Acid res. (powder)	1

Mechanical properties	
Knoop hardness	451 (5)
Abrasion hardness	114
Young's mod. [GPa]	70.6
Shear mod. [GPa]	28.8
Poisson's ratio	0.226
Stress optical coef. [1E-5 nm/cm／Pa]	2.62

Internal trans. (10mm)	
λ [nm]	τ
280	–
290	–
300	–
310	0.05
320	0.25
330	0.57
340	0.81
350	0.923
360	0.969
370	0.985
380	0.991
390	0.995
400	0.997
420	0.997
440	0.996
460	0.997
480	0.997
500	0.998
550	0.998
600	0.998
650	0.997
700	0.998
800	0.998
900	0.998
1000	0.998
1200	0.997
1400	0.989
1600	0.990
1800	0.971
2000	0.945
2200	0.88
2400	0.85

Specific gravity
2.5

Relative Δn/ΔT [1E-6/℃]

Temp. [℃]	1.083	t	s	A'	r	C	C'	He-Ne	d	e	F	F'	g	h	0.389
80 to 90 (ref.)	0.4	0.5	0.5	0.7	0.8	0.9	0.9	0.9	1.0	1.2	1.5	1.6	2.0	2.4	2.5
60 to 80 (ref.)	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.9	1.1	1.4	1.5	1.9	2.3	2.4
40 to 60	0.3	0.3	0.4	0.5	0.6	0.7	0.7	0.7	0.8	1.0	1.3	1.3	1.8	2.1	2.3
20 to 40	0.2	0.2	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.9	1.2	1.2	1.6	2.0	2.1
0 to 20	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.8	1.1	1.2	1.6	1.9	2.0
−20 to 0	0.2	0.2	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.8	1.1	1.2	1.6	1.9	2.0
−40 to −20	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.2	1.2	1.6	1.9	2.0
−60 to −40 (ref.)	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.3	1.4	1.7	2.0	2.1
−70 to −60 (ref.)	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.1	1.2	1.5	1.5	1.9	2.2	2.3

Absolute Δn/ΔT [1E-6/℃]

Temp. [℃]	1.083	t	s	A'	r	C	C'	He-Ne	d	e	F	F'	g	h	0.389
80 to 90	−0.5	−0.5	−0.3	−0.3	−0.2	−0.1	−0.1	0.0	0.1	0.2	0.6	0.6	1.0	1.4	1.6
60 to 80	−0.7	−0.6	−0.5	−0.4	−0.3	−0.3	−0.2	−0.2	−0.1	0.0	0.4	0.4	0.8	1.2	1.3
40 to 60	−0.9	−0.8	−0.7	−0.6	−0.6	−0.5	−0.5	−0.4	−0.3	−0.2	0.1	0.2	0.6	0.9	1.1
20 to 40	−1.1	−1.1	−0.9	−0.9	−0.8	−0.7	−0.7	−0.7	−0.6	−0.4	−0.1	−0.1	0.3	0.6	0.8
0 to 20	−1.3	−1.3	−1.2	−1.1	−1.0	−0.9	−0.9	−0.9	−0.8	−0.7	−0.4	−0.4	0.0	0.3	0.5
−20 to 0	−1.5	−1.5	−1.4	−1.3	−1.2	−1.2	−1.2	−1.1	−1.0	−0.9	−0.6	−0.6	−0.2	0.1	0.2
−40 to −20	−1.7	−1.7	−1.6	−1.5	−1.5	−1.4	−1.4	−1.4	−1.3	−1.2	−0.9	−0.9	−0.5	−0.2	−0.1
−60 to −40	−1.9	−1.9	−1.8	−1.8	−1.7	−1.6	−1.6	−1.6	−1.5	−1.4	−1.2	−1.1	−0.8	−0.5	−0.4
−70 to −60	−2.1	−2.1	−2.0	−1.9	−1.9	−1.8	−1.8	−1.8	−1.7	−1.6	−1.3	−1.3	−1.0	−0.7	−0.6

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.31786626E-01
Q1	9.86678624E+01
P2	1.83036821E-02
Q2	2.74845709E-02
P3	2.79397396E-01
Q3	5.25409101E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.3	5.9
Frac. eq. (ref.)	0.3	6.3

Prod. Freq. (A to D)	C

Similar glass type			
OHARA	S-NSL3	HOYA	E-C3
CDGM	H-K10	SCHOTT	-

2022-7-1	StP, AP, SP
2019-4-1	Transmittance
2016-4-1	Prod. Freq