

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

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
StP [°C]	542
AP [°C]	579
SP [°C]	720
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	-
290	-
300	-
310	-
320	-
330	-
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

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

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

2022-7-1	StP, AP, SP
2019-4-1	Transmittance
2018-4-1	Prod. Freq.