

J-SK10

$$n_d = 1.622800$$

$$n_e = 1.625400$$

$$v_d = 57.10$$

$$v_e = 56.83$$

Glass code (d)
623571
Glass code (e)
625568

Spectral l.	Refractive idx
2.058	1.59692
1.970	1.59817
1.530	1.60391
1.129	1.60900
1.064	1.60993
t	1.61070
s	1.61369
A'	1.615735
r	1.617616
C	1.619492
C'	1.620018
He-Ne	1.620509
D	1.622703
d	1.622800
e	1.625400
F	1.630399
F'	1.631023
g	1.636358
h	1.641315
0.389	1.644342
i	1.649783

Coef. disp. form. (pwr ser.)	
A0	2.58848328E+00
A1	-9.52709742E-03
A2	-9.90298068E-05
A3	1.60216897E-02
A4	2.07026667E-04
A5	6.19900432E-06
A6	1.17812844E-08
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.010907
F'-C'	0.011005
C-t	0.008788
C-A'	0.003757
d-C	0.003308
e-C	0.005908
g-d	0.013558
g-F	0.005959
h-g	0.004957
i-g	0.013425
C'-t	0.009314
e-C'	0.005382
F'-e	0.005623
i-F'	0.018760

Relative partial dispersion	
C-t/F-C	0.8057
C-A'/F-C	0.3445
d-C/F-C	0.3033
e-C/F-C	0.5417
g-d/F-C	1.2431
g-F/F-C	0.5463
h-g/F-C	0.4545
i-g/F-C	1.2309
C'-t/F'-C'	0.8463
e-C'/F'-C'	0.4891
F'-e/F'-C'	0.5109
i-F'/F'-C'	1.7047

Deviation of relative partial disp.	
ΔPdC	0.0003
ΔPgF	-0.0022

Internal CC (80%/5%)	
342/292	
Color Code (80%/5%)	
355/295	
CCI	
B	0.00
G	0.21
R	0.20

Thermal properties	
CTE(-30,70) [1E-7/°C]	68
CTE(100,300) [1E-7/°C]	80
Tg [°C]	623
At [°C]	671
StP [°C]	572
AP [°C]	609
SP [°C]	746
Ht condct. [W/m·K]	0.822
Sp. heat [kJ/kg·K]	0.521
Ht diffus. [1E-6 m2/sec]	0.440

Chemical properties [class]	
Acid res. (surface)	7
Alkaline detergent res.	3
Climate resistance	3
Water res. (powder)	2
Acid res. (powder)	4

Mechanical properties	
Knoop hardness	547 (5)
Abrasion hardness	167
Young's mod. [GPa]	82.7
Shear mod. [GPa]	32.5
Poisson's ratio	0.273
Stress optical coef. [1E-5 nm/cm/Pa]	2.16

Internal trans. (10mm)	
λ [nm]	τ
280	-
290	0.04
300	0.11
310	0.25
320	0.45
330	0.63
340	0.77
350	0.87
360	0.928
370	0.962
380	0.978
390	0.987
400	0.992
420	0.995
440	0.995
460	0.995
480	0.998
500	0.998
550	0.999
600	0.999
650	0.998
700	0.999
800	0.998
900	0.996
1000	0.996
1200	0.997
1400	0.989
1600	0.989
1800	0.976
2000	0.959
2200	0.89
2400	0.78

Specific gravity	
3.58	

Relative Δn/ΔT [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.)	2.0	2.0	2.1	2.3	2.4	2.5	2.5	2.6	2.7	2.9	3.3	3.3	3.7	4.1	4.3	
60 to 80 (ref.)	1.9	1.9	2.1	2.2	2.3	2.4	2.4	2.4	2.6	2.7	3.1	3.1	3.6	3.9	4.1	
40 to 60	1.7	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.6	2.9	2.9	3.3	3.7	3.9	
20 to 40	1.6	1.7	1.8	1.9	2.0	2.1	2.1	2.1	2.3	2.4	2.7	2.8	3.2	3.5	3.7	
0 to 20	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.0	2.2	2.3	2.6	2.7	3.0	3.4	3.5	
-20 to 0	1.5	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.1	2.2	2.5	2.6	2.9	3.3	3.4	
-40 to -20	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.5	2.6	2.9	3.2	3.4	
-60 to -40 (ref.)	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.6	2.6	3.0	3.3	3.4	
-70 to -60 (ref.)	1.8	1.9	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.8	2.8	3.1	3.4	3.5	

Absolute Δn/ΔT [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	1.0	1.0	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.9	2.2	2.3	2.7	3.1	3.3	
60 to 80	0.8	0.8	1.0	1.1	1.2	1.3	1.3	1.3	1.5	1.6	2.0	2.0	2.4	2.8	3.0	
40 to 60	0.5	0.5	0.7	0.8	0.9	1.0	1.0	1.0	1.2	1.3	1.6	1.7	2.1	2.4	2.6	
20 to 40	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.7	0.8	1.0	1.3	1.3	1.7	2.1	2.2	
0 to 20	0.0	0.0	0.1	0.2	0.3	0.4	0.4	0.4	0.5	0.7	1.0	1.0	1.4	1.7	1.9	
-20 to 0	-0.3	-0.3	-0.2	-0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.6	0.7	1.0	1.3	1.5	
-40 to -20	-0.6	-0.6	-0.5	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.3	0.3	0.7	0.9	1.1	
-60 to -40	-0.9	-0.9	-0.8	-0.7	-0.6	-0.6	-0.5	-0.5	-0.4	-0.3	0.0	0.0	0.3	0.6	0.7	
-70 to -60	-1.1	-1.1	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.5	-0.3	-0.3	0.0	0.3	0.4	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.22567490E-01
Q1	8.97846825E+01
P2	3.82261328E-02
Q2	2.10742317E-02
P3	3.07985247E-01
Q3	4.76996135E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.3	1.9
Frac. eq. (ref.)	0.4	1.7

Prod. Freq. (A to D)	C
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Similar glass type			
OHARA	S-BSM10	HOYA	E-BACD10
CDGM	H-ZK10L	SCHOTT	-

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