J-KZFH6

n_d = 1.683760 n_e = 1.688068

ν_d = 37.64 ν_e = 37.39

Glass code (d)
684376
Glass code (e)
688374

Spectral l.	Refractive idx
2.058	1.64728
1.970	1.64877
1.530	1.65584
1.129	1.66259
1.064	1.66389
t	1.66499
s	1.66937
A'	1.672490
r	1.675419
C	1.678397
C'	1.679240
He-Ne	1.680031
D	1.683601
d	1.683760
e	1.688068
F	1.696564
F'	1.697644
g	1.707068
h	1.716148
0.389	1.721865
i	1.732514

Coef. disp. form. (pwr ser.)	
A0	2.76011543E+00
A1	-1.23775063E-02
A2	0.00000000E+00
A3	2.44484473E-02
A4	1.15656997E-03
A5	-9.74000173E-05
A6	1.85226731E-05
A7	-1.41521524E-06
A8	5.92951085E-08

Partial dispersion	
F-C	0.018167
F'-C'	0.018404
C-t	0.013408
C-A'	0.005907
d-C	0.005363
e-C	0.009671
g-d	0.023308
g-F	0.010504
h-g	0.009080
i-g	0.025446
C'-t	0.014251
e-C'	0.008828
F'-e	0.009576
i-F'	0.034870

Relative partial dispersion	
C-t／F-C	0.7380
C-A'／F-C	0.3251
d-C／F-C	0.2952
e-C／F-C	0.5323
g-d／F-C	1.2830
g-F／F-C	0.5782
h-g／F-C	0.4998
i-g／F-C	1.4007
C'-t／F'-C'	0.7743
e-C'／F'-C'	0.4797
F'-e／F'-C'	0.5203
i-F'／F'-C'	1.8947

Deviation of relative partial disp.	
ΔPdC	0.0010
ΔPgF	-0.0030

Internal CC (80%/5%)
354/324
Color Code (80%/5%)
370/325
CCI

B	0.00
G	0.55
R	0.59

Thermal properties	
CTE(-30,70) [1E-7/℃]	66
CTE(100,300) [1E-7/℃]	87
Tg [℃]	539
At [℃]	598
StP [℃]	496
AP [℃]	534
SP [℃]	681
Ht cndct. [W/m･K]	0.940
Sp. heat [kJ/kg･K]	0.670
Ht diffus. [1E-6 m2/sec]	0.448

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

Mechanical properties	
Knoop hardness	533 (5)
Abrasion hardness	134
Young's mod. [GPa]	93.7
Shear mod. [GPa]	37.4
Poisson's ratio	0.254
Stress optical coef. [1E-5 nm/cm／Pa]	3.52

Internal trans. (10mm)	
λ [nm]	τ
280	–
290	–
300	–
310	–
320	0.01
330	0.18
340	0.53
350	0.75
360	0.86
370	0.918
380	0.948
390	0.964
400	0.974
420	0.983
440	0.987
460	0.990
480	0.992
500	0.994
550	0.997
600	0.997
650	0.998
700	0.997
800	0.999
900	0.999
1000	0.999
1200	0.999
1400	0.992
1600	0.994
1800	0.984
2000	0.971
2200	0.906
2400	0.81

Specific gravity
3.13

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.)	3.2	3.3	3.4	3.6	3.8	4.1	4.1	4.2	4.5	4.8	5.6	5.7	6.7	7.7	8.4
60 to 80 (ref.)	3.1	3.1	3.4	3.5	3.7	3.9	4.0	4.0	4.3	4.7	5.4	5.5	6.4	7.4	8.1
40 to 60	2.9	3.0	3.2	3.4	3.6	3.7	3.8	3.9	4.1	4.5	5.2	5.2	6.1	7.0	7.7
20 to 40	2.8	2.9	3.1	3.3	3.4	3.6	3.7	3.7	4.0	4.3	4.9	5.0	5.8	6.7	7.3
0 to 20	2.8	2.8	3.0	3.2	3.3	3.5	3.6	3.6	3.9	4.1	4.8	4.8	5.6	6.4	7.0
-20 to 0	2.8	2.8	3.0	3.1	3.3	3.5	3.5	3.6	3.8	4.1	4.6	4.7	5.4	6.2	6.8
-40 to -20	2.8	2.9	3.0	3.2	3.3	3.5	3.5	3.6	3.8	4.1	4.6	4.7	5.3	6.1	6.6
-60 to -40 (ref.)	3.0	3.0	3.2	3.3	3.5	3.6	3.6	3.7	3.9	4.1	4.6	4.7	5.3	6.0	6.5
-70 to -60 (ref.)	3.1	3.2	3.4	3.5	3.6	3.8	3.8	3.9	4.0	4.3	4.8	4.8	5.4	6.1	6.5

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	2.2	2.2	2.4	2.6	2.8	3.0	3.1	3.1	3.4	3.8	4.5	4.6	5.6	6.6	7.3
60 to 80	2.0	2.0	2.2	2.4	2.6	2.8	2.8	2.9	3.2	3.5	4.2	4.3	5.2	6.2	6.9
40 to 60	1.7	1.7	1.9	2.1	2.3	2.5	2.5	2.6	2.8	3.2	3.8	3.9	4.8	5.7	6.3
20 to 40	1.4	1.5	1.6	1.8	2.0	2.2	2.2	2.3	2.5	2.8	3.4	3.5	4.3	5.2	5.8
0 to 20	1.1	1.2	1.4	1.5	1.7	1.8	1.9	1.9	2.2	2.5	3.1	3.1	3.9	4.7	5.3
-20 to 0	0.9	0.9	1.1	1.2	1.4	1.5	1.6	1.6	1.8	2.1	2.7	2.7	3.4	4.2	4.7
-40 to -20	0.6	0.6	0.8	0.9	1.1	1.2	1.3	1.3	1.5	1.8	2.3	2.3	3.0	3.7	4.2
-60 to -40	0.3	0.3	0.5	0.6	0.8	0.9	0.9	1.0	1.2	1.4	1.9	1.9	2.5	3.2	3.6
-70 to -60	0.1	0.1	0.3	0.4	0.5	0.7	0.7	0.7	0.9	1.1	1.6	1.6	2.2	2.8	3.2

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.36151744E-01
Q1	8.82344575E+01
P2	2.58910372E-02
Q2	4.47526587E-02
P3	3.43689118E-01
Q3	6.53259775E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.7	14.5
Frac. eq. (ref.)	2.7	11.2

Prod. Freq. (A to D)	A

Similar glass type			
OHARA	-	HOYA	-
CDGM	-	SCHOTT	-

2022-7-1	StP, AP, SP
2019-4-1	Transmittance
2018-9-1	1st edition

HIKARI GLASS CO., LTD.