J-PSK03

n_d = 1.603000 n_e = 1.605199

ν_d = 65.44 ν_e = 65.17

Glass code (d)
603654
Glass code (e)
605652

Spectral l.	Refractive idx
2.058	1.57914
1.970	1.58040
1.530	1.58607
1.129	1.59092
1.064	1.59178
t	1.59248
s	1.59515
A'	1.596945
r	1.598572
C	1.600183
C'	1.600633
He-Ne	1.601052
D	1.602918
d	1.603000
e	1.605199
F	1.609398
F'	1.609919
g	1.614364
h	1.618467
0.389	1.620961
i	1.625420

Coef. disp. form. (pwr ser.)	
A0	2.53267453E+00
A1	-9.50416844E-03
A2	-1.06883723E-04
A3	1.34397360E-02
A4	1.41770605E-04
A5	4.73043880E-06
A6	-8.62000830E-08
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.009215
F'-C'	0.009286
C-t	0.007701
C-A'	0.003238
d-C	0.002817
e-C	0.005016
g-d	0.011364
g-F	0.004966
h-g	0.004103
i-g	0.011056
C'-t	0.008151
e-C'	0.004566
F'-e	0.004720
i-F'	0.015501

Relative partial dispersion	
C-t／F-C	0.8357
C-A'／F-C	0.3514
d-C／F-C	0.3057
e-C／F-C	0.5443
g-d／F-C	1.2332
g-F／F-C	0.5389
h-g／F-C	0.4453
i-g／F-C	1.1998
C'-t／F'-C'	0.8778
e-C'／F'-C'	0.4917
F'-e／F'-C'	0.5083
i-F'／F'-C'	1.6693

Deviation of relative partial disp.	
ΔPdC	-0.0010
ΔPgF	0.0043

Internal CC (80%/5%)
334/263
Color Code (80%/5%)
345/265

CCI	
B	0.00
G	0.19
R	0.17

Thermal properties	
CTE(-30,70) [1E-7/℃]	89
CTE(100,300) [1E-7/℃]	103
Tg [℃]	603
At [℃]	639
StP [℃]	551
AP [℃]	586
SP [℃]	701
Ht cndct. [W/m･K]	0.671
Sp. heat [kJ/kg･K]	0.570
Ht diffus. [1E-6 m2/sec]	0.335

Chemical properties [class]	
Acid res. (surface)	4
Alkaline detergent res.	4
Climate resistance	2
Water res. (powder)	1
Acid res. (powder)	5

Mechanical properties	
Knoop hardness	316 (3)
Abrasion hardness	398
Young's mod. [GPa]	70.0
Shear mod. [GPa]	27.2
Poisson's ratio	0.284
Stress optical coef. [1E-5 nm/cm／Pa]	1.40

Internal trans. (10mm)	
λ [nm]	τ
280	0.15
290	0.27
300	0.40
310	0.54
320	0.67
330	0.78
340	0.86
350	0.918
360	0.953
370	0.973
380	0.984
390	0.990
400	0.992
420	0.994
440	0.995
460	0.996
480	0.997
500	0.998
550	0.999
600	0.999
650	0.998
700	0.998
800	0.999
900	0.999
1000	0.999
1200	0.999
1400	0.995
1600	0.988
1800	0.965
2000	0.936
2200	0.85
2400	0.79

Specific gravity
3.52

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.)	-2.8	-2.8	-2.7	-2.6	-2.5	-2.5	-2.4	-2.4	-2.3	-2.2	-2.0	-2.0	-1.7	-1.4	-1.3
60 to 80 (ref.)	-2.9	-2.9	-2.7	-2.7	-2.6	-2.5	-2.5	-2.5	-2.4	-2.3	-2.1	-2.0	-1.8	-1.5	-1.4
40 to 60	-2.9	-2.9	-2.8	-2.8	-2.7	-2.6	-2.6	-2.6	-2.5	-2.4	-2.2	-2.1	-1.9	-1.7	-1.5
20 to 40	-3.0	-3.0	-2.9	-2.8	-2.7	-2.7	-2.6	-2.6	-2.5	-2.4	-2.2	-2.2	-2.0	-1.8	-1.6
0 to 20	-3.0	-3.0	-2.9	-2.8	-2.7	-2.7	-2.7	-2.6	-2.6	-2.5	-2.3	-2.3	-2.0	-1.8	-1.7
-20 to 0	-2.9	-2.9	-2.8	-2.8	-2.7	-2.6	-2.6	-2.6	-2.5	-2.4	-2.3	-2.2	-2.0	-1.8	-1.7
-40 to -20	-2.8	-2.8	-2.7	-2.7	-2.6	-2.6	-2.5	-2.5	-2.4	-2.4	-2.2	-2.2	-2.0	-1.8	-1.7
-60 to -40 (ref.)	-2.6	-2.6	-2.5	-2.5	-2.4	-2.4	-2.3	-2.3	-2.3	-2.2	-2.0	-2.0	-1.8	-1.6	-1.5
-70 to -60 (ref.)	-2.4	-2.4	-2.3	-2.3	-2.2	-2.1	-2.1	-2.1	-2.0	-2.0	-1.8	-1.8	-1.6	-1.4	-1.3

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	-3.8	-3.8	-3.7	-3.6	-3.5	-3.5	-3.4	-3.4	-3.3	-3.2	-3.0	-3.0	-2.7	-2.5	-2.3
60 to 80	-3.9	-3.9	-3.8	-3.8	-3.7	-3.6	-3.6	-3.6	-3.5	-3.4	-3.2	-3.2	-2.9	-2.7	-2.5
40 to 60	-4.2	-4.1	-4.0	-4.0	-3.9	-3.8	-3.8	-3.8	-3.7	-3.6	-3.4	-3.4	-3.2	-2.9	-2.8
20 to 40	-4.4	-4.3	-4.2	-4.2	-4.1	-4.1	-4.0	-4.0	-3.9	-3.9	-3.7	-3.6	-3.4	-3.2	-3.1
0 to 20	-4.6	-4.5	-4.5	-4.4	-4.3	-4.3	-4.3	-4.2	-4.2	-4.1	-3.9	-3.9	-3.7	-3.5	-3.4
-20 to 0	-4.8	-4.7	-4.7	-4.6	-4.6	-4.5	-4.5	-4.5	-4.4	-4.3	-4.1	-4.1	-3.9	-3.8	-3.6
-40 to -20	-5.0	-4.9	-4.9	-4.8	-4.8	-4.7	-4.7	-4.7	-4.6	-4.5	-4.4	-4.4	-4.2	-4.0	-3.9
-60 to -40	-5.2	-5.1	-5.1	-5.0	-5.0	-4.9	-4.9	-4.9	-4.8	-4.8	-4.6	-4.6	-4.5	-4.3	-4.2
-70 to -60	-5.3	-5.3	-5.2	-5.2	-5.1	-5.1	-5.1	-5.1	-5.0	-5.0	-4.8	-4.8	-4.6	-4.5	-4.4

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.14862526E-01
Q1	8.23972872E+01
P2	6.20276986E-02
Q2	1.47458503E-02
P3	2.76130278E-01
Q3	3.76713473E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.4	2.8
Frac. eq. (ref.)	0.5	2.6

Prod. Freq. (A to D)	A

Similar glass type			
OHARA	S-PHM53	HOYA	-
CDGM	H-ZPK2A	SCHOTT	-

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

HIKARI GLASS CO., LTD.