J-LAF05

n_d = 1.762000 n_e = 1.766511

ν_d = 40.11 ν_e = 39.85

Glass code (d)
762401
Glass code (e)
767399

Spectral l.	Refractive idx
2.058	1.72631
1.970	1.72760
1.530	1.73385
1.129	1.74018
1.064	1.74145
t	1.74254
s	1.74699
A'	1.750213
r	1.753266
C	1.756381
C'	1.757264
He-Ne	1.758092
D	1.761833
d	1.762000
e	1.766511
F	1.775377
F'	1.776499
g	1.786251
h	1.795554
0.389	1.801358
i	1.812041

Coef. disp. form. (pwr ser.)	
A0	3.01897142E+00
A1	-1.06135241E-02
A2	-3.56215294E-05
A3	2.84177137E-02
A4	8.43869366E-04
A5	-1.12827377E-05
A6	3.11337221E-06
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.018996
F'-C'	0.019235
C-t	0.013839
C-A'	0.006168
d-C	0.005619
e-C	0.010130
g-d	0.024251
g-F	0.010874
h-g	0.009303
i-g	0.025790
C'-t	0.014722
e-C'	0.009247
F'-e	0.009988
i-F'	0.035542

Relative partial dispersion	
C-t／F-C	0.7285
C-A'／F-C	0.3247
d-C／F-C	0.2958
e-C／F-C	0.5333
g-d／F-C	1.2766
g-F／F-C	0.5724
h-g／F-C	0.4897
i-g／F-C	1.3577
C'-t／F'-C'	0.7654
e-C'／F'-C'	0.4807
F'-e／F'-C'	0.5193
i-F'／F'-C'	1.8478

Deviation of relative partial disp.	
ΔPdC	0.0005
ΔPgF	-0.0046

Internal CC (80%/5%)
365/332

Color Code (80%/5%)
390/330

CCI	
B	–
G	–
R	–

Thermal properties	
CTE(-30,70) [1E-7/℃]	63
CTE(100,300) [1E-7/℃]	78
Tg [℃]	606
At [℃]	645
Ht cndct. [W/m･K]	0.960
Sp. heat [kJ/kg･K]	0.577
Ht diffus. [1E-6 m2/sec]	0.422

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

Mechanical properties	
Knoop hardness	406 (4)
Abrasion hardness	109
Young's mod. [GPa]	116.3
Shear mod. [GPa]	47.3
Poisson's ratio	0.228
Stress optical coef. [1E-5 nm/cm／Pa]	2.85

Internal trans. (10mm)	
λ [nm]	τ
280	0.00
290	0.00
300	0.00
310	0.00
320	0.00
330	0.02
340	0.25
350	0.55
360	0.74
370	0.85
380	0.907
390	0.939
400	0.958
420	0.974
440	0.981
460	0.985
480	0.989
500	0.991
550	0.993
600	0.994
650	0.993
700	0.992
800	0.989
900	0.995
1000	0.994
1200	0.996
1400	0.995
1600	0.991
1800	0.986
2000	0.978
2200	0.959
2400	0.87

Specific gravity
3.94

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.)	8.0	8.1	8.3	8.6	8.9	9.2	9.3	9.3	9.7	10.2	11.1	11.2	12.3	13.5	14.2
60 to 80 (ref.)	7.8	7.9	8.2	8.4	8.7	9.0	9.1	9.1	9.5	9.9	10.8	11.0	12.1	13.2	13.9
40 to 60	7.6	7.7	7.9	8.2	8.4	8.7	8.8	8.9	9.2	9.6	10.5	10.6	11.7	12.8	13.4
20 to 40	7.4	7.5	7.7	8.0	8.2	8.5	8.6	8.6	9.0	9.4	10.2	10.3	11.4	12.4	13.0
0 to 20	7.3	7.3	7.6	7.8	8.1	8.3	8.4	8.5	8.8	9.2	10.0	10.1	11.1	12.1	12.7
-20 to 0	7.2	7.2	7.5	7.7	7.9	8.2	8.2	8.3	8.6	9.0	9.8	9.9	10.8	11.8	12.4
-40 to -20	7.1	7.2	7.4	7.7	7.9	8.1	8.2	8.3	8.6	8.9	9.7	9.8	10.7	11.6	12.2
-60 to -40 (ref.)	7.2	7.3	7.5	7.7	7.9	8.2	8.2	8.3	8.6	8.9	9.7	9.8	10.6	11.5	12.1
-70 to -60 (ref.)	7.4	7.4	7.6	7.8	8.1	8.3	8.3	8.4	8.7	9.0	9.7	9.8	10.7	11.5	12.1

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	6.9	7.0	7.3	7.5	7.8	8.1	8.2	8.3	8.6	9.1	10.0	10.1	11.2	12.3	13.1
60 to 80	6.6	6.7	7.0	7.2	7.5	7.8	7.9	7.9	8.3	8.7	9.6	9.7	10.8	11.9	12.6
40 to 60	6.3	6.3	6.6	6.9	7.1	7.4	7.5	7.5	7.9	8.3	9.2	9.3	10.3	11.4	12.0
20 to 40	5.9	6.0	6.2	6.5	6.7	7.0	7.0	7.1	7.4	7.8	8.7	8.8	9.8	10.8	11.4
0 to 20	5.5	5.6	5.8	6.1	6.3	6.6	6.6	6.7	7.0	7.4	8.2	8.3	9.3	10.2	10.9
-20 to 0	5.2	5.2	5.5	5.7	5.9	6.2	6.2	6.3	6.6	7.0	7.7	7.8	8.7	9.7	10.3
-40 to -20	4.8	4.9	5.1	5.3	5.5	5.7	5.8	5.9	6.2	6.5	7.2	7.3	8.2	9.1	9.7
-60 to -40	4.4	4.5	4.7	4.9	5.1	5.3	5.4	5.5	5.7	6.1	6.8	6.9	7.7	8.6	9.1
-70 to -60	4.2	4.2	4.4	4.6	4.8	5.0	5.1	5.1	5.4	5.7	6.4	6.5	7.3	8.1	8.7

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.12020693E-01
Q1	9.19206483E+01
P2	2.91343182E-02
Q2	3.83429496E-02
P3	3.73059130E-01
Q3	6.25915395E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	7.2
Frac. eq. (ref.)	1.2	9.0

Prod. Freq. (A to D)	C

Similar glass type			
OHARA	S-LAM55	HOYA	–
CDGM	H-LaF55	SCHOTT	–

2019-4-1	Transmittance
2018-4-1	Prod. Freq.
2015-4-1	Color Code, Similar glass type

HIKARI GLASS CO., LTD.