

J-LASF08A

$n_d = 1.883000$

$n_e = 1.888158$

$v_d = 40.69$

$v_e = 40.44$

Glass code (d)
883407
Glass code (e)
888404

Spectral l.	Refractive idx
2.058	1.84112
1.970	1.84270
1.530	1.85025
1.129	1.85777
1.064	1.85926
t	1.86054
s	1.86572
A'	1.869450
r	1.872971
C	1.876555
C'	1.877569
He-Ne	1.878520
D	1.882809
d	1.883000
e	1.888158
F	1.898256
F'	1.899531
g	1.910567
h	1.921025
0.389	1.927512
i	1.939369

Partial dispersion	
F-C	0.021701
F'-C'	0.021962
C-t	0.016015
C-A'	0.007105
d-C	0.006445
e-C	0.011603
g-d	0.027567
g-F	0.012311
h-g	0.010458
i-g	0.028802
C'-t	0.017029
e-C'	0.010589
F'-e	0.011373
i-F'	0.039838

Relative partial dispersion	
C-t/F-C	0.7380
C-A'/F-C	0.3274
d-C/F-C	0.2970
e-C/F-C	0.5347
g-d/F-C	1.2703
g-F/F-C	0.5673
h-g/F-C	0.4819
i-g/F-C	1.3272
C'-t/F'-C'	0.7754
e-C'/F'-C'	0.4822
F'-e/F'-C'	0.5178
i-F'/F'-C'	1.8140

Deviation of relative partial disp.	
ΔPdC	0.0014
ΔPgF	-0.0088

Internal CC (80%/5%)	
363/329	
Color Code (70%/5%)	
370/330	
CCI	
B	0.00
G	0.90
R	0.92

Thermal properties	
CTE(-30,70) [1E-7/°C]	62
CTE(100,300) [1E-7/°C]	77
Tg [°C]	700
At [°C]	740
StP [°C]	662
AP [°C]	693
SP [°C]	806
Ht condct. [W/m·K]	0.790
Sp. heat [kJ/kg·K]	0.403
Ht diffus. [1E-6 m2/sec]	0.362

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	655 (7)
Abrasion hardness	57
Young's mod. [GPa]	124.9
Shear mod. [GPa]	48.0
Poisson's ratio	0.302
Stress optical coef. [1E-5 nm/cm/Pa]	1.23

Internal trans. (10mm)		
λ [nm]	τ	
280	-	
290	-	
300	-	
310	-	
320	-	
330	0.06	
340	0.30	
350	0.57	
360	0.76	
370	0.86	
380	0.912	
390	0.942	
400	0.959	
420	0.975	
440	0.982	
460	0.988	
480	0.991	
500	0.995	
550	0.998	
600	0.998	
650	0.998	
700	0.999	
800	0.999	
900	0.998	
1000	0.999	
1200	0.999	
1400	0.999	
1600	0.998	
1800	0.992	
2000	0.977	
2200	0.948	
2400	0.82	

Coef. disp. form. (pwr ser.)	
A0	3.44086290E+00
A1	-1.38053657E-02
A2	-5.63338044E-05
A3	3.50570730E-02
A4	9.60233781E-04
A5	-7.65969630E-06
A6	2.57013206E-06
A7	0.00000000E+00
A8	0.00000000E+00

Specific gravity	
5.41	

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.)	3.9	4.0	4.3	4.5	4.8	5.0	5.1	5.1	5.5	5.9	6.7	6.8	7.8	8.7	9.4	
60 to 80 (ref.)	3.7	3.8	4.2	4.4	4.6	4.8	4.9	5.0	5.3	5.7	6.5	6.6	7.5	8.5	9.1	
40 to 60	3.6	3.7	4.0	4.2	4.4	4.6	4.7	4.8	5.1	5.4	6.2	6.3	7.2	8.1	8.8	
20 to 40	3.4	3.5	3.9	4.1	4.3	4.5	4.5	4.6	4.9	5.2	6.0	6.1	7.0	7.8	8.4	
0 to 20	3.3	3.5	3.8	4.0	4.2	4.4	4.4	4.5	4.8	5.1	5.8	5.9	6.7	7.6	8.1	
-20 to 0	3.3	3.4	3.7	3.9	4.1	4.3	4.4	4.4	4.7	5.0	5.7	5.8	6.6	7.4	7.9	
-40 to -20	3.4	3.5	3.8	3.9	4.1	4.3	4.4	4.4	4.7	5.0	5.6	5.7	6.5	7.3	7.8	
-60 to -40 (ref.)	3.5	3.6	3.9	4.1	4.3	4.4	4.5	4.5	4.8	5.1	5.7	5.8	6.5	7.3	7.8	
-70 to -60 (ref.)	3.7	3.8	4.1	4.3	4.4	4.6	4.7	4.7	5.0	5.2	5.9	5.9	6.6	7.4	7.8	

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	2.7	2.8	3.2	3.4	3.6	3.8	3.9	4.0	4.3	4.7	5.5	5.6	6.5	7.5	8.2	
60 to 80	2.5	2.6	2.9	3.1	3.3	3.6	3.6	3.7	4.0	4.4	5.2	5.3	6.2	7.1	7.8	
40 to 60	2.2	2.3	2.6	2.8	3.0	3.2	3.3	3.3	3.6	4.0	4.7	4.8	5.7	6.6	7.2	
20 to 40	1.8	1.9	2.2	2.4	2.6	2.9	2.9	3.0	3.3	3.6	4.3	4.4	5.3	6.1	6.7	
0 to 20	1.5	1.6	1.9	2.1	2.3	2.5	2.6	2.6	2.9	3.2	3.9	4.0	4.8	5.6	6.2	
-20 to 0	1.2	1.3	1.6	1.8	1.9	2.1	2.2	2.2	2.5	2.8	3.5	3.6	4.3	5.1	5.6	
-40 to -20	0.9	1.0	1.2	1.4	1.6	1.8	1.8	1.9	2.1	2.4	3.0	3.1	3.9	4.6	5.1	
-60 to -40	0.6	0.7	0.9	1.1	1.2	1.4	1.5	1.5	1.7	2.0	2.6	2.7	3.4	4.1	4.6	
-70 to -60	0.3	0.4	0.7	0.8	1.0	1.1	1.2	1.2	1.5	1.7	2.3	2.4	3.1	3.7	4.2	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.34045707E-01
Q1	9.83260621E+01
P2	4.96463488E-02
Q2	2.94341953E-02
P3	3.98912094E-01
Q3	5.38901754E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.9	8.6
Frac. eq. (ref.)	1.8	6.3

Prod. Freq. (A to D)	A
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Similar glass type			
OHARA	S-LAH58	HOYA	TAFD30
CDGM	H-ZLaF68C	SCHOTT	N-LASF31A

2022-7-1	StP, AP, SP
2020-4-1	Similar glass type
2019-4-1	Transmittance