

J-LASFH23

$n_d = 1.850000$

$n_e = 1.857418$

$v_d = 27.03$

$v_e = 26.81$

Glass code (d)	850270
Glass code (e)	857268

Spectral l.	Refractive idx
2.058	1.79871
1.970	1.80026
1.530	1.80794
1.129	1.81637
1.064	1.81818
t	1.81975
s	1.82634
A'	1.831271
r	1.836025
C	1.840948
C'	1.842357
He-Ne	1.843682
D	1.849728
d	1.850000
e	1.857418
F	1.872398
F'	1.874334
g	1.891561
h	1.908764
0.389	1.919943
i	-

Coef. disp. form. (pwr ser.)	
A0	3.27710657E+00
A1	-1.20480934E-02
A2	-1.05066933E-04
A3	4.70173769E-02
A4	9.57912660E-04
A5	2.82409939E-04
A6	-2.89931135E-05
A7	2.51862401E-06
A8	0.00000000E+00

Partial dispersion	
F-C	0.031450
F'-C'	0.031977
C-t	0.021201
C-A'	0.009677
d-C	0.009052
e-C	0.016470
g-d	0.041561
g-F	0.019163
h-g	0.017203
i-g	-
C'-t	0.022610
e-C'	0.015061
F'-e	0.016916
i-F'	-

Relative partial dispersion	
C-t/F-C	0.6741
C-A'/F-C	0.3077
d-C/F-C	0.2878
e-C/F-C	0.5237
g-d/F-C	1.3215
g-F/F-C	0.6093
h-g/F-C	0.5470
i-g/F-C	-
C'-t/F'-C'	0.7071
e-C'/F'-C'	0.4710
F'-e/F'-C'	0.5290
i-F'/F'-C'	-

Deviation of relative partial disp.	
ΔPdC	-0.0016
ΔPgF	0.0103

Internal CC (80%/5%)	
390/357	

Color Code (70%/5%)	
395/360	

CCI	
B	0.00
G	2.35
R	2.53

Thermal properties	
CTE(-30,70) [1E-7/°C]	76
CTE(100,300) [1E-7/°C]	95
Tg [°C]	594
At [°C]	644
Ht condct. [W/m·K]	0.876
Sp. heat [kJ/kg·K]	0.561
Ht diffus. [1E-6 m2/sec]	0.401

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	472 (5)
Abrasion hardness	164
Young's mod. [GPa]	98.1
Shear mod. [GPa]	38.2
Poisson's ratio	0.283
Stress optical coef. [1E-5 nm/cm/Pa]	2.75

Internal trans. (10mm)	
λ [nm]	τ
280	0.00
290	0.00
300	0.00
310	0.00
320	0.00
330	0.00
340	0.00
350	0.00
360	0.09
370	0.35
380	0.63
390	0.80
400	0.88
420	0.942
440	0.963
460	0.973
480	0.980
500	0.986
550	0.993
600	0.996
650	0.997
700	0.998
800	0.998
900	0.998
1000	0.998
1200	0.998
1400	0.999
1600	0.992
1800	0.981
2000	0.971
2200	0.945
2400	0.88

Specific gravity	
3.9	

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.)	-0.4	-0.3	0.2	0.6	1.0	1.4	1.5	1.6	2.1	2.8	4.2	4.4	6.4	8.6	10.2
60 to 80 (ref.)	-0.4	-0.3	0.2	0.5	0.9	1.3	1.4	1.5	2.0	2.6	4.0	4.2	6.1	8.2	9.8
40 to 60	-0.4	-0.3	0.1	0.5	0.8	1.2	1.3	1.4	1.8	2.4	3.8	3.9	5.7	7.8	9.3
20 to 40	-0.4	-0.2	0.1	0.4	0.8	1.1	1.2	1.3	1.7	2.3	3.5	3.7	5.4	7.4	8.9
0 to 20	-0.3	-0.2	0.2	0.5	0.7	1.1	1.1	1.2	1.7	2.2	3.3	3.5	5.1	7.0	8.5
-20 to 0	-0.1	0.0	0.3	0.5	0.8	1.1	1.2	1.2	1.6	2.1	3.2	3.4	4.9	6.7	8.1
-40 to -20	0.1	0.2	0.5	0.7	0.9	1.2	1.3	1.3	1.7	2.1	3.2	3.3	4.8	6.5	7.9
-60 to -40 (ref.)	0.4	0.5	0.7	0.9	1.2	1.4	1.5	1.5	1.9	2.3	3.2	3.4	4.7	6.4	7.7
-70 to -60 (ref.)	0.7	0.8	1.0	1.2	1.4	1.6	1.7	1.8	2.1	2.5	3.4	3.5	4.8	6.4	7.7

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	-1.5	-1.4	-0.9	-0.6	-0.2	0.2	0.3	0.4	1.0	1.6	3.1	3.3	5.2	7.4	9.0
60 to 80	-1.6	-1.5	-1.1	-0.7	-0.4	0.0	0.1	0.2	0.7	1.4	2.7	2.9	4.8	6.9	8.5
40 to 60	-1.8	-1.7	-1.3	-0.9	-0.6	-0.2	-0.1	-0.1	0.4	1.0	2.3	2.5	4.3	6.3	7.8
20 to 40	-1.9	-1.8	-1.4	-1.1	-0.8	-0.5	-0.4	-0.3	0.1	0.7	1.9	2.1	3.7	5.7	7.2
0 to 20	-2.1	-2.0	-1.6	-1.4	-1.1	-0.8	-0.7	-0.6	-0.2	0.3	1.5	1.6	3.2	5.1	6.5
-20 to 0	-2.2	-2.1	-1.8	-1.6	-1.3	-1.0	-1.0	-0.9	-0.5	0.0	1.0	1.2	2.7	4.5	5.9
-40 to -20	-2.4	-2.3	-2.0	-1.8	-1.5	-1.3	-1.2	-1.2	-0.8	-0.4	0.6	0.8	2.2	3.9	5.2
-60 to -40	-2.5	-2.4	-2.2	-2.0	-1.8	-1.6	-1.5	-1.4	-1.1	-0.7	0.2	0.3	1.6	3.3	4.5
-70 to -60	-2.6	-2.6	-2.3	-2.2	-2.0	-1.8	-1.7	-1.6	-1.4	-1.0	-0.1	0.0	1.2	2.8	4.1

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.15215113E-01
Q1	8.86478948E+01
P2	2.76609321E-02
Q2	5.86167377E-02
P3	4.03904542E-01
Q3	8.32250156E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	1.0	4.2
Frac. eq. (ref.)	2.9	8.8

Prod. Freq. (A to D)	A
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Similar glass type			
OHARA	-	HOYA	-
CDGM	-	SCHOTT	-

-	-
2019-4-1	Transmittance
2015-4-1	1st edition