

# J-LASFH24

 $n_d = 1.902000$ 
 $n_e = 1.910410$ 
 $v_d = 25.26$ 
 $v_e = 25.06$ 

Glass code (d)
902253
Glass code (e)
910251

Spectral l.	Refractive idx
2.058	1.84515
1.970	1.84681
1.530	1.85508
1.129	1.86432
1.064	1.86631
t	1.86804
s	1.87537
A'	1.880892
r	1.886230
C	1.891774
C'	1.893362
He-Ne	1.894858
D	1.901692
d	1.902000
e	1.910410
F	1.927478
F'	1.929693
g	1.949493
h	1.969440
0.389	1.982512
i	-

Coef. disp. form. (pwr ser.)	
A0	3.45215485E+00
A1	-1.40748042E-02
A2	0.00000000E+00
A3	5.02420375E-02
A4	3.57942817E-03
A5	-4.94644665E-04
A6	1.29480898E-04
A7	-1.35467075E-05
A8	6.96875364E-07

Partial dispersion	
F-C	0.035704
F'-C'	0.036331
C-t	0.023731
C-A'	0.010882
d-C	0.010226
e-C	0.018636
g-d	0.047493
g-F	0.022015
h-g	0.019947
i-g	-
C'-t	0.025319
e-C'	0.017048
F'-e	0.019283
i-F'	-

Relative partial dispersion	
C-t/F-C	0.6647
C-A'/F-C	0.3048
d-C/F-C	0.2864
e-C/F-C	0.5220
g-d/F-C	1.3302
g-F/F-C	0.6166
h-g/F-C	0.5587
i-g/F-C	-
C'-t/F'-C'	0.6969
e-C'/F'-C'	0.4692
F'-e/F'-C'	0.5308
i-F'/F'-C'	-

Deviation of relative partial disp.	
$\Delta PdC$	-0.0022
$\Delta PgF$	0.0146

Internal CC (80%/5%)	
409/366	
Color Code (70%/5%)	
420/365	
CCI	
B	0.00
G	5.45
R	5.71

Thermal properties	
CTE(-30,70) [1E-7/°C]	77
CTE(100,300) [1E-7/°C]	89
Tg [°C]	659
At [°C]	706
StP [°C]	613
AP [°C]	649
SP [°C]	771
Ht condct. [W/m·K]	0.983
Sp. heat [kJ/kg·K]	0.551
Ht diffus. [1E-6 m2/sec]	0.436

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	513 (5)
Abrasion hardness	144
Young's mod. [GPa]	102.1
Shear mod. [GPa]	39.7
Poisson's ratio	0.285
Stress optical coef. [1E-5 nm/cm/Pa]	2.34

Internal trans. (10mm)	
$\lambda$ [nm]	$\tau$
280	-
290	-
300	-
310	-
320	-
330	-
340	-
350	-
360	0.01
370	0.11
380	0.34
390	0.57
400	0.72
420	0.86
440	0.923
460	0.953
480	0.968
500	0.979
550	0.992
600	0.997
650	0.997
700	0.998
800	0.997
900	0.996
1000	0.997
1200	0.999
1400	0.999
1600	0.992
1800	0.983
2000	0.978
2200	0.957
2400	0.900

Specific gravity
4.1

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.)	0.3	0.4	0.7	1.1	1.5	1.9	2.0	2.1	2.7	3.5	5.2	5.4	7.8	10.9	-	-
60 to 80 (ref.)	0.1	0.3	0.7	1.0	1.3	1.7	1.8	1.9	2.5	3.2	4.9	5.1	7.4	10.3	-	-
40 to 60	0.0	0.1	0.5	0.8	1.1	1.5	1.6	1.7	2.2	2.9	4.5	4.7	6.8	9.6	-	-
20 to 40	-0.2	0.0	0.3	0.6	0.9	1.3	1.4	1.5	2.0	2.6	4.1	4.3	6.3	8.9	-	-
0 to 20	-0.2	-0.1	0.2	0.5	0.8	1.1	1.2	1.3	1.8	2.4	3.8	4.0	5.9	8.2	-	-
-20 to 0	-0.3	-0.2	0.2	0.4	0.7	1.0	1.1	1.2	1.7	2.2	3.5	3.7	5.5	7.6	-	-
-40 to -20	-0.2	-0.1	0.2	0.4	0.7	1.0	1.1	1.2	1.6	2.1	3.4	3.5	5.1	7.1	-	-
-60 to -40 (ref.)	-0.1	0.0	0.3	0.5	0.8	1.1	1.2	1.2	1.6	2.2	3.3	3.4	4.9	6.7	-	-
-70 to -60 (ref.)	0.2	0.2	0.5	0.7	1.0	1.2	1.3	1.4	1.8	2.3	3.3	3.5	4.9	6.5	-	-

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	-0.9	-0.8	-0.4	0.0	0.3	0.7	0.8	0.9	1.5	2.3	4.0	4.2	6.6	9.6	-	-
60 to 80	-1.1	-1.0	-0.6	-0.3	0.0	0.4	0.5	0.6	1.2	1.9	3.5	3.8	6.0	8.9	-	-
40 to 60	-1.4	-1.3	-1.0	-0.7	-0.4	0.0	0.1	0.2	0.8	1.4	3.0	3.2	5.3	8.0	-	-
20 to 40	-1.8	-1.6	-1.3	-1.0	-0.7	-0.4	-0.3	-0.2	0.3	1.0	2.4	2.6	4.6	7.1	-	-
0 to 20	-2.1	-2.0	-1.7	-1.4	-1.1	-0.8	-0.7	-0.6	-0.1	0.5	1.8	2.0	3.9	6.2	-	-
-20 to 0	-2.4	-2.3	-2.0	-1.8	-1.5	-1.2	-1.1	-1.0	-0.5	0.0	1.3	1.5	3.2	5.3	-	-
-40 to -20	-2.7	-2.6	-2.3	-2.1	-1.9	-1.6	-1.5	-1.4	-1.0	-0.5	0.7	0.9	2.5	4.4	-	-
-60 to -40	-3.0	-2.9	-2.7	-2.5	-2.2	-2.0	-1.9	-1.8	-1.4	-0.9	0.2	0.3	1.7	3.5	-	-
-70 to -60	-3.3	-3.2	-2.9	-2.7	-2.5	-2.3	-2.2	-2.1	-1.7	-1.3	-0.3	-0.1	1.2	2.8	-	-

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.07493029E-01
Q1	8.15532458E+01
P2	2.93223861E-02
Q2	6.08031611E-02
P3	4.20201675E-01
Q3	8.51713693E-03

Fitting error of disp. form. $\sigma$ [1E-6]		
	Visible	Infrared
Power ser. eq.	1.0	4.8
Frac. eq. (ref.)	2.9	9.4

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

2022-7-1	StP, AP, SP
2019-4-1	Transmittance
2016-4-1	Similar glass type