

# J-LASFH24HS

$n_d = 1.902000$

$n_e = 1.910410$

$v_d = 25.26$

$v_e = 25.06$

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%)	
400/366	

Color Code (70%/5%)	
410/365	

CCI	
B	0.00
G	3.65
R	3.80

Thermal properties	
CTE(-30,70) [1E-7/°C]	77
CTE(100,300) [1E-7/°C]	89
Tg [°C]	659
At [°C]	706
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	0.00
290	0.00
300	0.00
310	0.00
320	0.00
330	0.00
340	0.00
350	0.00
360	0.00
370	0.13
380	0.45
390	0.69
400	0.81
420	0.910
440	0.951
460	0.969
480	0.978
500	0.984
550	0.994
600	0.996
650	0.996
700	0.997
800	0.997
900	0.997
1000	0.998
1200	0.999
1400	0.998
1600	0.997
1800	0.989
2000	0.980
2200	0.959
2400	0.905

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	-

-	-
2019-4-1	Transmittance
2017-4-1	1st edition