

J-LASFH16HS

$$n_d = 2.001000$$

$$n_e = 2.009122$$

$$v_d = 29.12$$

$$v_e = 28.90$$

Glass code (d)
001291
Glass code (e)
009289

Spectral l.	Refractive idx
2.058	1.94401
1.970	1.94574
1.530	1.95434
1.129	1.96378
1.064	1.96579
t	1.96754
s	1.97486
A'	1.980334
r	1.985599
C	1.991039
C'	1.992592
He-Ne	1.994053
D	2.000702
d	2.001000
e	2.009122
F	2.025410
F'	2.027504
g	2.046018
h	2.064272
0.389	2.075999
i	—

Coef. disp. form. (pwr ser.)	
A0	3.83294326E+00
A1	-1.56840611E-02
A2	0.00000000E+00
A3	5.28843692E-02
A4	3.50978963E-03
A5	-5.06491928E-04
A6	1.15081798E-04
A7	-1.10388704E-05
A8	5.01900181E-07

Partial dispersion	
F-C	0.034371
F'-C'	0.034912
C-t	0.023502
C-A'	0.010705
d-C	0.009961
e-C	0.018083
g-d	0.045018
g-F	0.020608
h-g	0.018254
i-g	—
C'-t	0.025055
e-C'	0.016530
F'-e	0.018382
i-F'	—

Relative partial dispersion	
C-t/F-C	0.6838
C-A'/F-C	0.3115
d-C/F-C	0.2898
e-C/F-C	0.5261
g-d/F-C	1.3098
g-F/F-C	0.5996
h-g/F-C	0.5311
i-g/F-C	—
C'-t/F'-C'	0.7177
e-C'/F'-C'	0.4735
F'-e/F'-C'	0.5265
i-F'/F'-C'	—

Deviation of relative partial disp.	
ΔPdC	-0.0005
ΔPgF	0.0041

Internal CC (80%/5%)	
391/360	
Color Code (70%/5%)	
405/360	
CCI	
B	0.00
G	2.62
R	2.75

Thermal properties	
CTE(-30,70) [1E-7/°C]	71
CTE(100,300) [1E-7/°C]	86
Tg [°C]	721
At [°C]	756
StP [°C]	681
AP [°C]	713
SP [°C]	824
Ht condct. [W/m·K]	0.979
Sp. heat [kJ/kg·K]	0.437
Ht diffus. [1E-6 m2/sec]	0.439

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

Mechanical properties	
Knoop hardness	647 (6)
Abrasion hardness	53
Young's mod. [GPa]	130.3
Shear mod. [GPa]	49.8
Poisson's ratio	0.307
Stress optical coef. [1E-5 nm/cm/Pa]	0.91

Internal trans. (10mm)	
λ [nm]	τ
280	—
290	—
300	—
310	—
320	—
330	—
340	—
350	—
360	0.05
370	0.32
380	0.62
390	0.79
400	0.87
420	0.937
440	0.961
460	0.973
480	0.981
500	0.987
550	0.996
600	0.997
650	0.998
700	0.998
800	0.998
900	0.998
1000	0.998
1200	0.999
1400	0.999
1600	0.997
1800	0.988
2000	0.972
2200	0.947
2400	0.84

Specific gravity
5.1

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.)	2.7	2.9	3.3	3.7	4.1	4.5	4.6	4.7	5.3	6.0	7.6	7.8	10.0	12.4	14.3	
60 to 80 (ref.)	2.6	2.7	3.1	3.5	3.9	4.3	4.4	4.5	5.0	5.7	7.3	7.5	9.5	11.9	13.7	
40 to 60	2.4	2.5	2.9	3.2	3.6	4.0	4.1	4.2	4.7	5.4	6.9	7.1	9.0	11.3	12.9	
20 to 40	2.2	2.3	2.7	3.0	3.4	3.7	3.8	4.0	4.5	5.1	6.5	6.7	8.5	10.6	12.2	
0 to 20	2.1	2.2	2.6	2.9	3.2	3.5	3.7	3.7	4.2	4.8	6.1	6.3	8.1	10.1	11.5	
-20 to 0	2.0	2.1	2.5	2.8	3.1	3.4	3.5	3.6	4.1	4.6	5.9	6.0	7.7	9.5	10.9	
-40 to -20	2.0	2.1	2.5	2.8	3.1	3.4	3.5	3.5	4.0	4.5	5.7	5.8	7.4	9.1	10.3	
-60 to -40 (ref.)	2.2	2.3	2.6	2.9	3.1	3.4	3.5	3.6	4.0	4.5	5.6	5.8	7.2	8.8	9.9	
-70 to -60 (ref.)	2.3	2.4	2.8	3.0	3.3	3.6	3.7	3.7	4.1	4.6	5.7	5.8	7.2	8.7	9.7	

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	1.6	2.1	2.5	2.8	3.2	3.4	3.5	4.0	4.8	6.3	6.5	8.7	11.1	12.9	
60 to 80	1.2	1.4	1.8	2.1	2.5	2.9	3.0	3.1	3.7	4.4	5.9	6.1	8.1	10.5	12.2	
40 to 60	0.9	1.0	1.4	1.7	2.1	2.5	2.6	2.7	3.2	3.8	5.3	5.5	7.4	9.7	11.3	
20 to 40	0.5	0.6	1.0	1.3	1.7	2.0	2.1	2.2	2.7	3.3	4.7	4.9	6.7	8.8	10.3	
0 to 20	0.1	0.2	0.6	0.9	1.2	1.6	1.7	1.8	2.2	2.8	4.1	4.3	6.0	8.0	9.4	
-20 to 0	-0.2	-0.1	0.2	0.5	0.8	1.1	1.2	1.3	1.7	2.3	3.5	3.7	5.3	7.1	8.4	
-40 to -20	-0.6	-0.5	-0.2	0.1	0.4	0.7	0.8	0.8	1.3	1.8	2.9	3.1	4.6	6.3	7.5	
-60 to -40	-1.0	-0.9	-0.6	-0.3	-0.1	0.2	0.3	0.4	0.8	1.3	2.3	2.5	3.9	5.4	6.5	
-70 to -60	-1.3	-1.2	-0.9	-0.6	-0.4	-0.1	0.0	0.0	0.4	0.9	1.9	2.0	3.3	4.8	5.8	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.08840381E-01
Q1	8.45835040E+01
P2	2.54513844E-02
Q2	5.52459928E-02
P3	4.60003603E-01
Q3	7.68666453E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	1.2	5.6
Frac. eq. (ref.)	2.0	9.1

Prod. Freq. (A to D)	A
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Similar glass type			
OHARA	S-LAH99W	HOYA	TAFD55-W
CDGM	—	SCHOTT	—

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2024-4-1	1st edition