

J-LASFH17

$n_d = 2.000690$

$n_e = 2.009954$

$v_d = 25.46$

$v_e = 25.25$

Glass code (d)	001255
Glass code (e)	010253

Spectral l.	Refractive idx
2.058	1.93788
1.970	1.93971
1.530	1.94886
1.129	1.95908
1.064	1.96128
t	1.96320
s	1.97130
A'	1.977399
r	1.983293
C	1.989413
C'	1.991165
He-Ne	1.992815
D	2.000351
d	2.000690
e	2.009954
F	2.028724
F'	2.031156
g	2.052860
h	2.074654
0.389	2.088894
i	-

Coef. disp. form. (pwr ser.)	
A0	3.81071676E+00
A1	-1.63737936E-02
A2	0.00000000E+00
A3	5.83672875E-02
A4	4.12726108E-03
A5	-5.52229126E-04
A6	1.41302816E-04
A7	-1.45517862E-05
A8	7.44426800E-07

Partial dispersion	
F-C	0.039311
F'-C'	0.039991
C-t	0.026211
C-A'	0.012014
d-C	0.011277
e-C	0.020541
g-d	0.052170
g-F	0.024136
h-g	0.021794
i-g	-
C'-t	0.027963
e-C'	0.018789
F'-e	0.021202
i-F'	-

Relative partial dispersion	
C-t/F-C	0.6668
C-A'/F-C	0.3056
d-C/F-C	0.2869
e-C/F-C	0.5225
g-d/F-C	1.3271
g-F/F-C	0.6140
h-g/F-C	0.5544
i-g/F-C	-
C'-t/F'-C'	0.6992
e-C'/F'-C'	0.4698
F'-e/F'-C'	0.5302
i-F'/F'-C'	-

Deviation of relative partial disp.	
ΔPdC	-0.0018
ΔPgF	0.0123

Internal CC (80%/5%)	
425/374	

Color Code (70%/5%)	
445/375	

CCI	
B	0.00
G	9.14
R	9.52

Thermal properties	
CTE(-30,70) [1E-7/°C]	68
CTE(100,300) [1E-7/°C]	83
Tg [°C]	681
At [°C]	727
Ht condct. [W/m·K]	1.020
Sp. heat [kJ/kg·K]	0.504
Ht diffus. [1E-6 m2/sec]	0.432

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	605 (6)
Abrasion hardness	86
Young's mod. [GPa]	123.8
Shear mod. [GPa]	47.7
Poisson's ratio	0.298
Stress optical coef. [1E-5 nm/cm/Pa]	1.59

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	0.00
370	0.02
380	0.13
390	0.33
400	0.52
420	0.76
440	0.88
460	0.928
480	0.955
500	0.971
550	0.991
600	0.996
650	0.998
700	0.998
800	0.996
900	0.997
1000	0.997
1200	0.998
1400	0.998
1600	0.997
1800	0.990
2000	0.980
2200	0.954
2400	0.88

Specific gravity	
4.69	

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.)	3.4	3.6	4.0	4.5	4.9	5.4	5.6	5.7	6.4	7.2	9.2	9.4	12.2	15.5	17.9	
60 to 80 (ref.)	3.3	3.4	3.9	4.3	4.7	5.2	5.3	5.4	6.1	6.9	8.8	9.0	11.7	14.9	17.2	
40 to 60	3.0	3.1	3.6	4.0	4.4	4.8	5.0	5.1	5.7	6.5	8.3	8.5	11.1	14.1	16.3	
20 to 40	2.8	2.9	3.3	3.7	4.1	4.6	4.7	4.8	5.4	6.1	7.8	8.1	10.5	13.3	15.4	
0 to 20	2.7	2.8	3.2	3.5	3.9	4.3	4.5	4.6	5.1	5.8	7.4	7.7	9.9	12.6	14.5	
-20 to 0	2.6	2.7	3.0	3.4	3.8	4.2	4.3	4.4	4.9	5.6	7.1	7.3	9.4	11.9	13.7	
-40 to -20	2.6	2.6	3.0	3.3	3.7	4.1	4.2	4.3	4.8	5.4	6.8	7.0	9.0	11.4	13.1	
-60 to -40 (ref.)	2.7	2.7	3.1	3.4	3.7	4.1	4.2	4.3	4.8	5.3	6.7	6.9	8.7	10.9	12.5	
-70 to -60 (ref.)	2.8	2.9	3.2	3.5	3.8	4.2	4.3	4.4	4.8	5.4	6.7	6.9	8.6	10.7	12.2	

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	2.2	2.3	2.8	3.3	3.7	4.2	4.3	4.5	5.1	6.0	7.9	8.2	10.9	14.2	16.6	
60 to 80	1.9	2.0	2.5	2.9	3.4	3.8	4.0	4.1	4.7	5.5	7.4	7.7	10.3	13.4	15.8	
40 to 60	1.5	1.6	2.1	2.5	2.9	3.3	3.5	3.6	4.2	5.0	6.7	7.0	9.5	12.4	14.6	
20 to 40	1.1	1.2	1.6	2.0	2.4	2.8	3.0	3.1	3.7	4.4	6.1	6.3	8.6	11.5	13.5	
0 to 20	0.7	0.8	1.2	1.6	1.9	2.3	2.5	2.6	3.1	3.8	5.4	5.6	7.8	10.5	12.4	
-20 to 0	0.3	0.4	0.8	1.1	1.5	1.9	2.0	2.1	2.6	3.2	4.7	4.9	7.0	9.5	11.3	
-40 to -20	-0.1	0.0	0.4	0.7	1.0	1.4	1.5	1.6	2.1	2.7	4.1	4.3	6.2	8.5	10.2	
-60 to -40	-0.5	-0.4	-0.1	0.2	0.5	0.9	1.0	1.1	1.5	2.1	3.4	3.6	5.4	7.5	9.0	
-70 to -60	-0.8	-0.7	-0.4	-0.1	0.2	0.5	0.6	0.7	1.1	1.7	2.9	3.1	4.8	6.8	8.2	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.00167110E-01
Q1	7.47066024E+01
P2	2.87199284E-02
Q2	6.00528312E-02
P3	4.54734535E-01
Q3	8.29318245E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	1.0	4.8
Frac. eq. (ref.)	3.1	13.8

Prod. Freq. (A to D)	A
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Similar glass type			
OHARA	-	HOYA	TAFD40
CDGM	H-ZLaF90	SCHOTT	-

2019-4-1	Transmittance
2016-4-1	Prod. Freq. Similar glass type
2015-4-1	Color Code, Prod. Freq