

J-LAK06

$n_d = 1.677900$

$n_e = 1.681085$

$v_d = 50.67$

$v_e = 50.39$

Glass code (d)	678507
Glass code (e)	681504

Spectral l.	Refractive idx
2.058	1.64833
1.970	1.64966
1.530	1.65584
1.129	1.66150
1.064	1.66256
t	1.66345
s	1.66693
A'	1.669359
r	1.671612
C	1.673877
C'	1.674514
He-Ne	1.675110
D	1.677781
d	1.677900
e	1.681085
F	1.687256
F'	1.688030
g	1.694688
h	1.700934
0.389	1.704781
i	1.711758

Coef. disp. form. (pwr ser.)	
A0	2.75830673E+00
A1	-1.04979587E-02
A2	-8.63280601E-05
A3	1.98026568E-02
A4	3.88736963E-04
A5	-3.98876195E-07
A6	8.98869177E-07
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.013379
F'-C'	0.013516
C-t	0.010432
C-A'	0.004518
d-C	0.004023
e-C	0.007208
g-d	0.016788
g-F	0.007432
h-g	0.006246
i-g	0.017070
C'-t	0.011069
e-C'	0.006571
F'-e	0.006945
i-F'	0.023728

Relative partial dispersion	
C-t/F-C	0.7797
C-A'/F-C	0.3377
d-C/F-C	0.3007
e-C/F-C	0.5388
g-d/F-C	1.2548
g-F/F-C	0.5555
h-g/F-C	0.4669
i-g/F-C	1.2759
C'-t/F'-C'	0.8190
e-C'/F'-C'	0.4862
F'-e/F'-C'	0.5138
i-F'/F'-C'	1.7555

Deviation of relative partial disp.	
ΔPdC	0.0006
ΔPgF	-0.0038

Internal CC (80%/5%)	
366/335	

Color Code (80%/5%)	
380/340	

CCI	
B	-
G	-
R	-

Thermal properties	
CTE(-30,70) [1E-7/°C]	63
CTE(100,300) [1E-7/°C]	75
Tg [°C]	650
At [°C]	690
Ht condct. [W/m·K]	0.843
Sp. heat [kJ/kg·K]	0.522
Ht diffus. [1E-6 m2/sec]	0.419

Chemical properties [class]	
Acid res. (surface)	6
Alkaline detergent res.	3
Climate resistance	1
Water res. (powder)	1
Acid res. (powder)	4

Mechanical properties	
Knoop hardness	523 (5)
Abrasion hardness	138
Young's mod. [GPa]	89.5
Shear mod. [GPa]	34.9
Poisson's ratio	0.281
Stress optical coef. [1E-5 nm/cm/Pa]	2.33

Internal trans. (10mm)	
λ [nm]	τ
280	0.00
290	0.00
300	0.00
310	0.00
320	0.00
330	0.01
340	0.16
350	0.47
360	0.71
370	0.85
380	0.913
390	0.949
400	0.967
420	0.982
440	0.987
460	0.989
480	0.992
500	0.994
550	0.996
600	0.995
650	0.995
700	0.995
800	0.991
900	0.997
1000	0.995
1200	0.997
1400	0.993
1600	0.992
1800	0.985
2000	0.974
2200	0.933
2400	0.82

Specific gravity	
3.83	

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	3.4	3.4	3.8	3.9	4.1	4.1	4.2	4.4	4.6	5.1	5.2	5.7	6.3	6.7
60 to 80 (ref.)	3.2	3.3	3.3	3.6	3.8	3.9	4.0	4.0	4.2	4.5	4.9	5.0	5.5	6.1	6.5
40 to 60	3.0	3.1	3.1	3.5	3.6	3.7	3.8	3.8	4.0	4.2	4.7	4.8	5.3	5.8	6.2
20 to 40	2.9	3.0	3.0	3.3	3.4	3.6	3.6	3.6	3.8	4.1	4.5	4.5	5.0	5.5	5.9
0 to 20	2.8	2.9	2.9	3.2	3.3	3.4	3.5	3.5	3.7	3.9	4.3	4.4	4.8	5.3	5.7
-20 to 0	2.8	2.8	2.8	3.1	3.2	3.4	3.4	3.4	3.6	3.8	4.2	4.2	4.7	5.1	5.5
-40 to -20	2.8	2.8	2.8	3.1	3.2	3.4	3.4	3.4	3.6	3.8	4.2	4.2	4.6	5.0	5.4
-60 to -40 (ref.)	2.9	3.0	3.0	3.2	3.3	3.4	3.5	3.5	3.7	3.8	4.2	4.2	4.6	5.0	5.4
-70 to -60 (ref.)	3.0	3.1	3.1	3.4	3.5	3.6	3.6	3.6	3.8	4.0	4.3	4.4	4.7	5.1	5.4

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	2.3	2.4	2.4	2.8	2.9	3.0	3.1	3.1	3.3	3.6	4.1	4.1	4.7	5.2	5.7
60 to 80	2.1	2.2	2.2	2.5	2.6	2.8	2.8	2.9	3.1	3.3	3.8	3.8	4.4	4.9	5.3
40 to 60	1.8	1.9	1.9	2.2	2.3	2.5	2.5	2.5	2.7	2.9	3.4	3.4	3.9	4.5	4.8
20 to 40	1.5	1.5	1.5	1.9	2.0	2.1	2.1	2.2	2.4	2.6	3.0	3.1	3.5	4.0	4.4
0 to 20	1.2	1.2	1.2	1.5	1.6	1.8	1.8	1.8	2.0	2.2	2.6	2.7	3.1	3.6	3.9
-20 to 0	0.9	0.9	0.9	1.2	1.3	1.4	1.5	1.5	1.7	1.9	2.2	2.3	2.7	3.1	3.5
-40 to -20	0.5	0.6	0.6	0.9	1.0	1.1	1.1	1.1	1.3	1.5	1.8	1.9	2.3	2.7	3.0
-60 to -40	0.2	0.3	0.3	0.5	0.6	0.7	0.8	0.8	0.9	1.1	1.5	1.5	1.9	2.2	2.5
-70 to -60	0.0	0.1	0.1	0.3	0.4	0.5	0.5	0.5	0.7	0.8	1.2	1.2	1.5	1.9	2.2

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.21365270E-01
Q1	8.80127306E+01
P2	1.94847920E-02
Q2	3.35885569E-02
P3	3.50024335E-01
Q3	5.68536774E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.4	2.6
Frac. eq. (ref.)	0.6	2.2

Prod. Freq. (A to D)	D
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Similar glass type			
OHARA	S-LAL56	HOYA	-
CDGM	-	SCHOTT	-

2019-4-1	Transmittance
2018-4-1	Prod. Freq.
2015-4-1	Color Code