

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
StP [°C]	-
AP [°C]	-
SP [°C]	-
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	-	
290	-	
300	-	
310	-	
320	-	
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	-	HOYA	-
CDGM	-	SCHOTT	-

2020-4-1	Similar glass type
2019-4-1	Transmittance
2018-4-1	Prod. Freq.