

# J-KF6

$n_d = 1.517420$

$n_e = 1.519777$

$v_d = 52.20$

$v_e = 51.93$

Glass code (d)
517522
Glass code (e)
520519

Spectral l.	Refractive idx
2.058	1.49223
1.970	1.49357
1.530	1.49959
1.129	1.50471
1.064	1.50561
t	1.50635
s	1.50914
A'	1.511021
r	1.512730
C	1.514429
C'	1.514905
He-Ne	1.515348
D	1.517332
d	1.517420
e	1.519777
F	1.524341
F'	1.524914
g	1.529871
h	1.534576
0.389	1.537508
i	1.542910

Coef. disp. form. (pwr ser.)	
A0	2.26653222E+00
A1	-9.74283829E-03
A2	-8.49115572E-05
A3	1.27195343E-02
A4	3.15395806E-04
A5	-8.83703038E-06
A6	1.84064027E-06
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.009912
F'-C'	0.010009
C-t	0.008080
C-A'	0.003408
d-C	0.002991
e-C	0.005348
g-d	0.012451
g-F	0.005530
h-g	0.004705
i-g	0.013039
C'-t	0.008556
e-C'	0.004872
F'-e	0.005137
i-F'	0.017996

Relative partial dispersion	
C-t/F-C	0.8152
C-A'/F-C	0.3438
d-C/F-C	0.3018
e-C/F-C	0.5395
g-d/F-C	1.2562
g-F/F-C	0.5579
h-g/F-C	0.4747
i-g/F-C	1.3155
C'-t/F'-C'	0.8548
e-C'/F'-C'	0.4868
F'-e/F'-C'	0.5132
i-F'/F'-C'	1.7980

Deviation of relative partial disp.	
$\Delta PdC$	0.0010
$\Delta PgF$	0.0011

Internal CC (80%/5%)	
359/334	
Color Code (80%/5%)	
365/335	
CCI	
B	0.00
G	0.30
R	0.31

Thermal properties	
CTE(-30,70) [1E-7/°C]	68
CTE(100,300) [1E-7/°C]	79
Tg [°C]	443
At [°C]	524
StP [°C]	399
AP [°C]	444
SP [°C]	642
Ht cndct. [W/m·K]	1.023
Sp. heat [kJ/kg·K]	0.748
Ht diffus. [1E-6 m2/sec]	0.555

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

Mechanical properties	
Knoop hardness	458 (5)
Abrasion hardness	84
Young's mod. [GPa]	66.9
Shear mod. [GPa]	27.5
Poisson's ratio	0.214
Stress optical coef. [1E-5 nm/cm/Pa]	3.52

Internal trans. (10mm)		
$\lambda$ [nm]	$\tau$	
280	-	
290	-	
300	-	
310	-	
320	-	
330	-	
340	0.18	
350	0.55	
360	0.83	
370	0.940	
380	0.970	
390	0.982	
400	0.988	
420	0.991	
440	0.992	
460	0.994	
480	0.996	
500	0.997	
550	0.999	
600	0.999	
650	0.999	
700	0.999	
800	0.999	
900	0.999	
1000	0.999	
1200	0.999	
1400	0.989	
1600	0.994	
1800	0.990	
2000	0.985	
2200	0.921	
2400	0.88	

Specific gravity	
2.47	

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.)	2.5	2.5	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.3	3.7	3.7	4.1	4.6	4.9		
60 to 80 (ref.)	2.3	2.4	2.5	2.6	2.7	2.8	2.8	2.8	3.0	3.1	3.5	3.5	3.9	4.4	4.7		
40 to 60	2.2	2.2	2.3	2.4	2.5	2.6	2.6	2.7	2.8	2.9	3.3	3.3	3.7	4.2	4.5		
20 to 40	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.5	2.6	2.8	3.1	3.1	3.5	3.9	4.2		
0 to 20	1.9	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.9	3.0	3.4	3.8	4.1		
-20 to 0	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.5	2.8	2.9	3.2	3.6	3.9		
-40 to -20	1.9	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.8	2.8	3.2	3.6	3.9		
-60 to -40 (ref.)	1.9	2.0	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.6	2.9	2.9	3.2	3.6	3.9		
-70 to -60 (ref.)	2.1	2.1	2.2	2.3	2.3	2.4	2.4	2.5	2.6	2.7	3.0	3.0	3.3	3.7	4.0		

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	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.4	2.7	2.7	3.2	3.6	3.9		
60 to 80	1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.8	1.9	2.1	2.4	2.5	2.9	3.3	3.6		
40 to 60	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.8	2.1	2.1	2.5	3.0	3.3		
20 to 40	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.8	1.8	2.2	2.6	2.9		
0 to 20	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.4	1.4	1.8	2.2	2.5		
-20 to 0	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.6	0.8	1.1	1.1	1.4	1.8	2.1		
-40 to -20	-0.2	-0.1	-0.1	0.0	0.1	0.2	0.2	0.2	0.3	0.4	0.7	0.8	1.1	1.5	1.7		
-60 to -40	-0.5	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.1	0.4	0.4	0.7	1.1	1.3		
-70 to -60	-0.7	-0.7	-0.6	-0.5	-0.5	-0.4	-0.4	-0.4	-0.3	-0.1	0.1	0.1	0.5	0.8	1.1		

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.31586600E-01
Q1	8.28160644E+01
P2	7.42229602E-03
Q2	5.27857629E-02
P3	2.89400464E-01
Q3	6.01259424E-03

Fitting error of disp. form. $\sigma$ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.8	5.0
Frac. eq. (ref.)	0.5	6.5

Prod. Freq. (A to D)	C
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Similar glass type			
OHARA	-	HOYA	E-CF6
CDGM	H-KF6	SCHOTT	-

2022-7-1	StP, AP, SP
2020-4-1	Similar glass type
2019-4-1	Transmittance