H-F13 626357

$n_d = 1.62588$	$\upsilon_d = 35.70$	$n_F - n_C = 0.017532$
$n_e = 1.63003$	$\upsilon_e = 35.43$	$n_{F'} - n_{C'} = 0.017780$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.58752
n_{1970}	1970.09	1.59329
n_{1530}	1529.58	1.59977
n_{1129}	1128.64	1.60594
n_{1064}	1064.00	1.60713
n_t	1013.98	1.60814
n_s	852.11	1.61220
$n_{A'}$	768.19	1.61513
n_r	706.52	1.61790
n_C	656.27	1.62074
$n_{C'}$	643.85	1.62155
n_{He-Ne}	632.80	1.62231
n_D	589.29	1.62573
n_d	587.56	1.62588
n_e	546.07	1.63003
n_F	486.13	1.63828
$n_{F'}$	479.99	1.63933
n_g	435.84	1.64860
n_h	404.66	1.65768
n_i	365.01	1.67466

Constants of Dispersion Formula	
A_0	2.57590334E+00
A_1	-1.10109986E-02
A_2	2.05548046E-02
A_3	1.79594369E-03
A_4	-1.78465029E-04
A_5	1.57736814E-05

Density	
ρ (g/cm^3)	2.72

Solarization	
△λ (%)	0.0

Relative Partial Dispersion	
$P_{d,C}$	0.2932
$P_{e,d}$	0.2367
$P_{g,F}$	0.5886
$P'_{d,c'}$	0.2435
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5214

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0043
$\Delta P_{C,t}$	0.0056
$\Delta P_{C,s}$	0.0010

Thermal Properties	
Tg (℃)	596
Ts (℃)	639
$T_{10}^{14.5}$ (℃)	522
T_{10}^{13} (℃)	566
$\alpha_{-50/80℃}$ (10^{-7}/K)	75
$\alpha_{100/300℃}$ (10^{-7}/K)	93
λ (W/(m·K))	1.19

Mechanical Properties	
HK (10^7Pa)	546
F_A	123
E (GPa)	80.4
G (GPa)	32.4
μ	0.240
σ_b (MPa)	70.6
B (10^{-12}/Pa)	3.04

Chemical Properties (grade)	
RC (S)	1
RA (S)	1
D_W	1
D_A	1
R_{OH} (S)	1
RP (S)	1

Expansion Coefficient α ($\times 10^{-7}$/K)	
℃	α
-50/-40	72
-40/-30	74
-30/-20	75
-20/-10	76
-10/0	76
0/10	77
10/20	77
20/30	77
30/40	78
40/50	78
50/60	78
60/70	78
70/80	79
80/90	80
90/100	81
100/110	82
110/120	83
120/130	85
130/140	86
140/150	87
150/160	88

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.945	0.893
2200	0.948	0.899
2000	0.982	0.964
1800	0.984	0.968
1600	0.998	0.996
1400	0.998	0.996
1200	0.998	0.996
1060	0.998	0.996
1000	0.998	0.996
950	0.998	0.996
900	0.998	0.996
850	0.998	0.996
800	0.998	0.996
750	0.998	0.996
700	0.998	0.996
650	0.998	0.996
600	0.998	0.996
550	0.998	0.996
500	0.996	0.993
480	0.994	0.989
460	0.992	0.984
440	0.989	0.978
420	0.982	0.967
400	0.967	0.936
390	0.941	0.890
380	0.877	0.772
370	0.699	0.490
360	0.308	0.098
350		
340		
330		
320		
310		
300		
290		
280		

Range of Temperature (℃)	Temperature Coefficients of Refractive Index dn/dt relative ($\times 10^{-6}$ / ℃)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	2.8	3.1	3.4	3.4	3.5	3.6	3.9	4.7	4.8	5.4
-40 ~ -20	2.8	3.1	3.4	3.4	3.5	3.7	4.0	4.7	4.8	5.5
-20 ~ 0	2.8	3.2	3.4	3.5	3.5	3.7	4.1	4.8	4.9	5.7
0 ~ 20	2.7	3.2	3.4	3.5	3.5	3.8	4.1	4.9	4.9	5.9
20 ~ 40	2.8	3.3	3.5	3.6	3.6	3.8	4.2	5.0	5.0	6.0
40 ~ 60	2.8	3.3	3.5	3.6	3.6	3.9	4.4	5.1	5.2	6.1
60 ~ 80	3.0	3.4	3.6	3.7	3.7	4.1	4.5	5.3	5.3	6.3
80 ~ 100	3.0	3.5	3.7	3.8	3.8	4.3	4.6	5.3	5.3	6.5
100 ~ 120	3.2	3.7	3.9	4.0	4.0	4.4	4.8	5.4	5.4	6.6
120 ~ 140	3.3	3.8	4.0	4.1	4.2	4.5	4.8	5.5	5.6	6.7
140 ~ 160	3.4	3.9	4.0	4.1	4.2	4.7	5.0	5.6	5.7	6.9

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	390/360
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	382/358

Constants of dn/dt		
D_0	D_1	D_2
2.09E-06	1.35E-08	-1.84E-11
E_0	E_1	λ_{TK}
6.50E-07	3.82E-10	2.92E-01