H-TF3L 613441

n_d = 1.61340	υ_d = 44.11	$n_F - n_C$ = 0.013907
n_e = 1.61669	υ_e = 43.91	$n_{F'} - n_{C'}$ = 0.014044

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.57673
n_{1970}	1970.09	1.58314
n_{1530}	1529.58	1.59013
n_{1129}	1128.64	1.59636
n_{1064}	1064.00	1.59749
n_t	1013.98	1.59843
n_s	852.11	1.60207
$n_{A'}$	768.19	1.60458
n_r	706.52	1.60690
n_C	656.27	1.60924
$n_{C'}$	643.85	1.60990
n_{He-Ne}	632.80	1.61051
n_D	589.29	1.61327
n_d	587.56	1.61340
n_e	546.07	1.61669
n_F	486.13	1.62315
$n_{F'}$	479.99	1.62394
n_g	435.84	1.63097
n_h	404.66	1.63765
n_i	365.01	1.64956

Relative Partial Dispersion	
$P_{d,C}$	0.2991
$P_{e,d}$	0.2366
$P_{g,F}$	0.5623
$P'_{d,c'}$	0.2492
$P'_{e,d}$	0.2343
$P'_{g,F'}$	0.5006

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0013
$\Delta P_{g,F}$	-0.0080
$\Delta P_{C,t}$	0.0234
$\Delta P_{C,s}$	0.0093

Thermal Properties	
Tg (℃)	579
Ts (℃)	623
$T_{10}^{14.5}$ (℃)	504
T_{10}^{13} (℃)	547
$\alpha_{-50/80℃}$ (10^{-7}/K)	62
$\alpha_{100/300℃}$ (10^{-7}/K)	78
λ (W/(m·K))	0.97

Mechanical Properties	
HK (10^7Pa)	575
F_A	111
E (GPa)	86.9
G (GPa)	35.1
μ	0.238
σ_b (MPa)	63.0
B (10^{-12}/Pa)	3.28

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	55
-40/-30	56
-30/-20	57
-20/-10	60
-10/0	63
0/10	62
10/20	61
20/30	64
30/40	63
40/50	66
50/60	65
60/70	66
70/80	68
80/90	66
90/100	73
100/110	69
110/120	68
120/130	72
130/140	71
140/150	76
150/160	73

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.885	0.782
2200	0.953	0.907
2000	0.994	0.988
1800	0.999	0.998
1600	0.999	0.998
1400	0.999	0.998
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.999	0.998
800	0.999	0.998
750	0.999	0.998
700	0.999	0.998
650	0.999	0.998
600	0.999	0.998
550	0.999	0.998
500	0.998	0.996
480	0.997	0.994
460	0.996	0.992
440	0.995	0.990
420	0.993	0.987
400	0.990	0.980
390	0.989	0.978
380	0.982	0.964
370	0.970	0.941
360	0.948	0.899
350	0.903	0.815
340	0.828	0.685
330	0.647	0.418
320	0.239	0.057
310		
300		
290		
280		

Constants of Dispersion Formula	
A_0	2.54989010E+00
A_1	-1.24016345E-02
A_2	1.74291594E-02
A_3	1.02656330E-03
A_4	-8.81502201E-05
A_5	6.75446845E-06

Density	
ρ (g/cm^3)	2.84

Solarization	
△λ (%)	-0.7

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	4.3	4.5	4.6	4.7	4.8	5.0	5.2	5.5	5.6	6.3
-40 ~ -20	4.3	4.6	4.7	4.8	4.9	5.0	5.2	5.6	5.7	6.4
-20 ~ 0	4.3	4.5	4.7	4.8	4.9	5.0	5.3	5.7	5.8	6.5
0 ~ 20	4.4	4.6	4.8	4.9	5.0	5.1	5.4	5.7	5.8	6.6
20 ~ 40	4.4	4.6	4.8	4.9	5.0	5.1	5.4	5.8	5.9	6.7
40 ~ 60	4.4	4.7	4.9	5.0	5.1	5.2	5.5	6.0	6.1	6.8
60 ~ 80	4.5	4.8	5.0	5.1	5.2	5.3	5.6	6.0	6.1	6.9
80 ~ 100	4.5	4.9	5.1	5.2	5.3	5.4	5.7	6.1	6.2	7.1
100 ~ 120	4.5	4.9	5.2	5.2	5.3	5.5	5.8	6.2	6.3	7.2
120 ~ 140	4.5	5.0	5.3	5.3	5.4	5.7	6.0	6.3	6.4	7.3
140 ~ 160	4.6	5.1	5.4	5.4	5.5	5.8	6.1	6.5	6.6	7.5

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	360/320
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	349/321

Constants of dn/dt		
D_0	D_1	D_2
5.46E-06	1.31E-08	-2.19E-11
E_0	E_1	λ_{TK}
4.56E-07	3.98E-10	2.95E-01