

H-ZLaF55F 835427

nd =1.83481	vd =42.72	nF – nC =0.019541
ne =1.83944	ve =42.49	nF' - nC' =0.019757

Refractive Indices		
	λ (nm)	
n_r	706.5	1.82562
n_c	656.3	1.82896
$n_{c'}$	643.8	1.82989
n_{He-Ne}	632.8	1.83076
n_D	589.3	1.83464
n_d	587.6	1.83481
n_e	546.1	1.83944
n_F	486.1	1.84850
$n_{F'}$	480.0	1.84965
n_g	435.8	1.85955
n_h	404.7	1.86892
n_i	365.0	1.88537

Chemical Properties	
	Group
RC(S)	1
RA(S)	2
DW	2
DA	3

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400		
2200		
2000		
1800		
1600		
1400	0.998	0.995
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.997
900	0.999	0.997
850	0.999	0.997
800	0.999	0.998
700	0.999	0.998
650	0.999	0.997
600	0.999	0.997
550	0.999	0.997
500	0.997	0.994
480	0.995	0.991
460	0.993	0.987
440	0.991	0.981
420	0.987	0.974
400	0.98	0.96
390	0.97	0.94
380	0.96	0.91
370	0.93	0.87
360	0.89	0.79
350	0.81	0.65
340	0.67	0.45
330	0.44	0.19
320		
310		
300		
290		
280		

Thermal Properties	
Tg (°C)	683
Ts (°C)	708
T ₁₀ ^{14.5} (°C)	637
T ₁₀ ¹³ (°C)	643
$\alpha_{20/120^\circ C}$ (10 ⁻⁷ /K)	64.31
$\alpha_{20/300^\circ C}$ (10 ⁻⁷ /K)	73.38

Constants of Dispersion (Cauchy)	
A ₀	3.3229153
A ₁	-5.3042782×10 ⁻²
A ₂	8.6109630×10 ⁻³
A ₃	5.7737001×10 ⁻³
A ₄	-5.4346653×10 ⁻⁴
A ₅	2.4791899×10 ⁻⁵

Mechanical Properties	
Hardness (10 ⁷ Pa)	685
FA (Relative Abrasion)	
Young's Modulus (10 ⁷ Pa)	12200
Rigidity Modulus (10 ⁷ Pa)	4700
Poisson's Ratio	0.300

Relative Partial Dispersions			
P _{d,c}	0.2992	P' _{d,c'}	0.2489
P _{e,d}	0.2370	P' _{e,d}	0.2344
P _{g,F}	0.5655	P' _{g,F'}	0.5012

Photoelastic Constant	
β (10 ⁻¹² /Pa)	1.34

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.003
$\Delta P_{g,F}$	-0.0071

Color	
λ_{80}/λ_5	40/33

Specific Gravity	
ρ (g/cm ³)	4.66

NHG	HOYA	OHARA	SCHOTT
H-ZLaF55F	TaFD5F	S-LAH55E	



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