Data Sheet

SCHOTT

N-SF66
923209.400

n_d = 1.92286	ν_d = 20.88	$n_F - n_C$ = 0.044199
n_e = 1.93322	ν_e = 20.70	$n_{F'} - n_{C'}$ = 0.045076

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.84839
$n_{1970.1}$	1970.1	1.85665
$n_{1529.6}$	1529.6	1.86650
$n_{1060.0}$	1060.0	1.87999
n_t	1014.0	1.88189
n_s	852.1	1.89064
n_r	706.5	1.90368
n_C	656.3	1.91039
$n_{C'}$	643.8	1.91232
$n_{632.8}$	632.8	1.91414
n_D	589.3	1.92248
n_d	587.6	1.92286
n_e	546.1	1.93322
n_F	486.1	1.95459
$n_{F'}$	480.0	1.95739
n_g	435.8	1.98285
n_h	404.7	
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.02459760
B_2	0.470187196
B_3	2.599704330
C_1	0.01470532250
C_2	0.0692998276
C_3	161.8176010

Constants of Formula for dn/dT

D_0	-4.30E-06
D_1	1.15E-08
D_2	4.31E-11
E_0	9.62E-07
E_1	1.62E-09
λ_{TK} [µm]	0.322

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.790	0.560
2325	0.840	0.640
1970	0.950	0.870
1530	0.989	0.973
1060	0.996	0.991
700	0.991	0.977
660	0.987	0.968
620	0.983	0.958
580	0.976	0.940
546	0.963	0.910
500	0.930	0.830
460	0.890	0.740
436	0.830	0.630
420	0.760	0.500
405	0.590	0.270
400	0.500	0.180
390	0.250	0.020
380	0.040	
370	0.000	
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ_{80} / λ_5	45/38*

(*= λ_{70}/λ_5)

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.1980
$P_{C,s}$	0.4467
$P_{d,C}$	0.2822
$P_{e,d}$	0.2345
$P_{g,F}$	0.6394
$P_{i,h}$	
$P'_{s,t}$	0.1941
$P'_{C',s}$	0.4808
$P'_{d,C'}$	0.2339
$P'_{e,d}$	0.2299
$P'_{g,F'}$	0.5647
$P'_{i,h}$	

Deviation of Relative Partial Dispersion ΔP from the normal line

$\Delta P_{C,t}$	0.0007
$\Delta P_{C,s}$	-0.0048
$\Delta P_{F,e}$	0.0059
$\Delta P_{g,F}$	0.0307
$\Delta P_{i,g}$	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.8
T_g [°C]	710
T_{10}^{13} [°C]	719
$T_{10}^{7.6}$ [°C]	800
c_p [J/(g*K)]	0.540
λ [W/(m•K)]	0.800
ρ [g/cm^3]	4.00
E [10^3 N/mm^2]	95
µ	0.259
K [10^{-6} mm^2/N]	2.86
HK$_{0.1/20}$	440
HG	3
CR	1
FR	0
SR	1
AR	1
PR	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	**1060.0**	**e**	**g**	**1060.0**	**e**	**g**
-40/-20	-0.4	1.9	5.8	-2.9	-0.7	3.1
+20/+40	-0.5	2.4	7.3	-2.1	0.8	5.5
+60/+80	0.1	3.4	8.9	-1.2	2.1	7.5