Data Sheet

SCHOTT

N-SSK2
622533.353

$n_d = 1.62229$	$\nu_d = 53.27$	$n_F - n_C = 0.011681$
$n_e = 1.62508$	$\nu_e = 52.99$	$n_{F'} - n_{C'} = 0.011795$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.59149
$n_{1970.1}$	1970.1	1.59685
$n_{1529.6}$	1529.6	1.60260
$n_{1060.0}$	1060.0	1.60880
n_t	1014.0	1.60953
n_s	852.1	1.61264
n_r	706.5	1.61678
n_C	656.3	1.61877
$n_{C'}$	643.8	1.61933
$n_{632.8}$	632.8	1.61985
n_D	589.3	1.62219
n_d	587.6	1.62229
n_e	546.1	1.62508
n_F	486.1	1.63045
$n_{F'}$	480.0	1.63112
n_g	435.8	1.63691
n_h	404.7	1.64232
n_i	365.0	1.65166
$n_{334.1}$	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	1.4306027
B_2	0.153150554
B_3	1.01390904
C_1	0.00823982975
C_2	0.0333736841
C_3	106.870822

Constants of Dispersion dn/dT

D_0	$5.21 \cdot 10^{-6}$
D_1	$1.34 \cdot 10^{-8}$
D_2	$-1.01 \cdot 10^{-11}$
E_0	$5.21 \cdot 10^{-7}$
E_1	$5.87 \cdot 10^{-10}$
λ_{TK} [µm]	0.199

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.758	0.500
2325	0.877	0.720
1970	0.971	0.930
1530	0.992	0.981
1060	0.997	0.992
700	0.998	0.996
660	0.998	0.994
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.994	0.985
436	0.992	0.980
420	0.990	0.975
405	0.985	0.963
400	0.981	0.954
390	0.967	0.920
380	0.941	0.860
370	0.891	0.750
365	0.852	0.670
350	0.574	0.250
334	0.084	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	37/33
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2661
$P_{C,s}$	0.5246
$P_{d,C}$	0.3016
$P_{e,d}$	0.2381
$P_{g,F}$	0.5526
$P_{i,h}$	0.7997
$P'_{s,t}$	0.2636
$P'_{C',s}$	0.5669
$P'_{d,C'}$	0.2513
$P'_{e,d}$	0.2358
$P'_{g,F'}$	0.4902
$P'_{i,h}$	0.7920

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"

$\Delta P_{C,t}$	-0.0069
$\Delta P_{C,s}$	-0.0025
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0016
$\Delta P_{i,g}$	-0.0146

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.7
T_g [°C]	653
$T_{10}^{13.0}$ [°C]	655
$T_{10}^{7.6}$ [°C]	801
c_p [J/(g·K)]	0.580
λ [W/(m·K)]	0.810
ρ [g/cm^3]	3.53
E [10^3 N/mm^2]	82
µ	0.261
K [10^{-6} mm^2/N]	2.51
HK$_{0.1/20}$	570
HG	3
B	1
CR	1
FR	0
SR	1.2
AR	1
PR	1

Temperature Coefficients of 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	4.2	5.0	5.8	2.1	2.8	3.5
+20/ +40	4.3	5.2	6.1	2.9	3.8	4.6
+60/ +80	4.5	5.5	6.4	3.5	4.4	5.3