Data Sheet

SCHOTT

N-SK2HT
607567.355

$n_d = 1.60738$	$\nu_d = 56.65$	$n_F - n_C = 0.010722$
$n_e = 1.60994$	$\nu_e = 56.37$	$n_{F'} - n_{C'} = 0.010821$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57881
$n_{1970.1}$	1970.1	1.58378
$n_{1529.6}$	1529.6	1.58914
$n_{1060.0}$	1060.0	1.59490
n_t	1014.0	1.59558
n_s	852.1	1.59847
n_r	706.5	1.60230
n_C	656.3	1.60414
$n_{C'}$	643.8	1.60465
$n_{632.8}$	632.8	1.60513
n_D	589.3	1.60729
n_d	587.6	1.60738
n_e	546.1	1.60994
n_F	486.1	1.61486
$n_{F'}$	480.0	1.61547
n_g	435.8	1.62073
n_h	404.7	1.62562
n_i	365.0	1.63398
$n_{334.1}$	334.1	1.64304
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.28189012
B_2	0.257738258
B_3	0.96818604
C_1	0.0072719164
C_2	0.0242823527
C_3	110.377773

Constants of Dispersion dn/dT

D_0	$3.80 \cdot 10^{-6}$
D_1	$1.41 \cdot 10^{-8}$
D_2	$2.28 \cdot 10^{-11}$
E_0	$6.44 \cdot 10^{-7}$
E_1	$8.03 \cdot 10^{-11}$
λ_{TK} [µm]	0.108

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.807	0.585
2325	0.890	0.748
1970	0.971	0.930
1530	0.995	0.987
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.996
620	0.998	0.996
580	0.999	0.997
546	0.999	0.997
500	0.998	0.995
460	0.997	0.992
436	0.996	0.991
420	0.997	0.992
405	0.996	0.991
400	0.996	0.990
390	0.994	0.986
380	0.992	0.980
370	0.987	0.968
365	0.983	0.957
350	0.955	0.892
334	0.869	0.703
320	0.654	0.346
310	0.385	0.092
300	0.130	
290	0.010	
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	33/28
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2690
$P_{C,s}$	0.5285
$P_{d,C}$	0.3027
$P_{e,d}$	0.2384
$P_{g,F}$	0.5477
$P_{i,h}$	0.7802
$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5713
$P'_{d,C'}$	0.2523
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4860
$P'_{i,h}$	0.7730

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

$\Delta P_{C,t}$	-0.0162
$\Delta P_{C,s}$	-0.0064
$\Delta P_{F,e}$	0.0003
$\Delta P_{g,F}$	-0.0008
$\Delta P_{i,g}$	-0.0130

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	659
$T_{10}^{13.0}$ [°C]	659
$T_{10}^{7.6}$ [°C]	823
c_p [J/(g·K)]	0.595
λ [W/(m·K)]	0.776
ρ [g/cm^3]	3.55
E [10^3 N/mm^2]	78
µ	0.263
K [10^{-6} mm^2/N]	2.31
HK$_{0.1/20}$	550
HG	2
CR	2
FR	0
SR	2.2
AR	1
PR	2.3

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	3.7	4.6	5.3	1.5	2.4	3.1
+20/ +40	3.6	4.5	5.3	2.3	3.1	3.9
+60/ +80	4.0	4.9	5.7	2.9	3.8	4.5