IRG202 Ge22Se58As20

$n_{10.6}$ = 2.4925	$\upsilon_{10.6}$ = 102.93	n_8-$n_{12.5}$ = 0.0145

Refractive Indices	
λ（μm）	n_λ
2.0	2.5265
3.0	2.5148
4.0	2.5101
5.0	2.5072
6.0	2.5047
7.0	2.5024
8.0	2.5000
9.0	2.4974
10.0	2.4944
11.0	2.4911
12.0	2.4875
12.5	2.4855
13.0	2.4835
14.0	2.4787

Constants of Dispersion Formula	
A	2.5074929E+00
B	7.5363484E-02
C	8.9642516E-03
D	-1.3362851E-04
E	-1.5544515E-08
F	-3.1301497E-10

Other Properties	
ρ (g/cm^3)	4.41
εr	

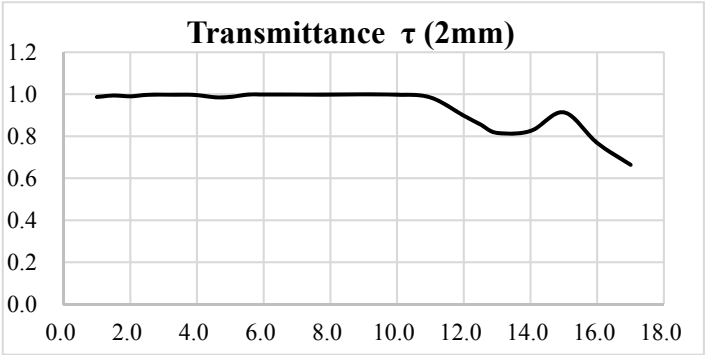
Chemical Properties (grade)	
RC(S)	1
RA(S)	1
D_W	2
D_A	1
R_{OH} (S)	1
RP (S)	1

Thermal Properties	
Tg (℃)	292
Ts (℃)	347
$\alpha_{-60/120℃}$ (10^{-7}/K)	164
$\alpha_{20/120℃}$ (10^{-7}/K)	165
Cp (J/g·K)	

Mechanical Properties	
HK (10^7Pa)	152
E (GPa)	18.6
G (GPa)	6.8
μ	0.37

Temperature Coefficients of Refractive Index (-40 ～ 80℃) (×10^{-6} /℃)	
λ (μm)	dn_{rel}/dt
3	41
5	40
8	39
10	39
12	37

Expansion Coefficient α (×10^{-7}/K)	
℃	α
-50/-40	161
-40/-30	162
-30/-20	163
-20/-10	164
-10/0	164
0/10	165
10/20	165
20/30	165
30/40	165
40/50	165
50/60	165
60/70	165
70/80	165
80/90	166
90/100	166
100/110	166
110/120	166
120/130	166
130/140	166
140/150	166
150/160	167

Internal Transmittance	
λ (μm)	τ 2mm
17.0	0.664
16.0	0.768
15.0	0.914
14.0	0.825
13.0	0.816
12.5	0.856
12.0	0.898
11.0	0.985
10.0	0.998
9.5	0.999
9.0	0.999
8.5	0.999
8.0	0.999
7.5	0.999
7.0	0.999
6.5	0.999
6.0	0.999
5.5	0.998
5.0	0.987
4.5	0.986
4.0	0.996
3.5	0.998
3.0	0.998
2.5	0.997
2.0	0.990
1.5	0.994
1.0	0.987

Constants of dn/dt	
D_0	3.41318E-05
D_1	3.57898E-08
D_2	5.35457E-10
E_0	3.75406E-05
E_1	6.49642E-07
λ_{TK}	-2.08675E+00