

IRG203	Ge20Se65Sb15
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$n_{10.6}= 2.5837$	$\nu_{10.6}= 86.07$	$n_{8000}-n_{12500}= 0.01840$
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Refractive Indices		
n	2000	2.6261
n	3000	2.6118
n	4000	2.6060
n	5000	2.6024
n	6000	2.5993
n	7000	2.5963
n	8000	2.5933
n	9000	2.5899
n	10000	2.5862
n	11000	2.5820
n	12000	2.5774
n	12500	2.5749
n	13000	2.5723
n	14000	2.5666

Constants of Dispersion Formula	
A	2.6027335E+00
B	9.4148223E-02
C	5.0288851E-03
D	-1.6360399E-04
E	-1.1188941E-07
F	-3.3257266E-11

Other Properties	
ρ (g/cm ³)	4.71
ϵ_r	10.11

Chemical Properties (grade)	
RC(S)	1
RA(S)	1
Dw	2
DA	1

Thermal Properties	
Tg(℃)	266
Ts(℃)	304
$\alpha_{-40/55^{\circ}\text{C}}(10^{-7}/\text{K})$	157
$\alpha_{20/120^{\circ}\text{C}}(10^{-7}/\text{K})$	165
Cp(J/gK)	

Mechanical Properties	
$H_K(20^{\circ}\text{C}, \text{ kgf/mm}^2)$	137
E(GPa)	20
G(GPa)	7.8
μ	0.28

Temperature Coefficients of Refractive Index		
Temperature (℃)	$\lambda(\text{nm})$	$dn/dt \text{ relative } (10^{-6} / ^{\circ}\text{C})$
-40~80	1500	
-40~80	2000	45
-40~80	3000	42
-40~80	5000~14000	40

Transmittance	
$\lambda(\text{nm})$	$\tau(2\text{mm})$
20000	0.009
19000	0.129
18000	0.080
17000	0.149
16000	0.525
15000	0.637
14000	0.657
13000	0.589
12000	0.585
11000	0.638
10000	0.678
9500	0.682
9000	0.678
8500	0.678
8000	0.674
7500	0.675
7000	0.671
6500	0.666
6000	0.669
5500	0.670
5000	0.668
4500	0.663
4000	0.665
3500	0.661
3000	0.660
2500	0.662
2000	0.672
1500	0.676
1000	0.651
800	0.326
600	
400	
200	

IR TRANSMITTANCE (2mm)

