

IRG201	Ge33Se55As12
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$n_{10.6} = 2.4940$	$v_{10.6} = 95.77$	$n_{8000} - n_{12500} = 0.01560$
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Refractive Indices		
n	2000	2.5293
n	3000	2.5175
n	4000	2.5127
n	5000	2.5097
n	6000	2.5072
n	7000	2.5047
n	8000	2.5021
n	9000	2.4993
n	10000	2.4961
n	11000	2.4926
n	12000	2.4886
n	12500	2.4865
n	13000	2.4843
n	14000	2.4794

Constants of Dispersion Formula	
A	2.5100146E+00
B	7.7495165E-02
C	4.9371281E-03
D	-1.3389514E-04
E	-1.3508347E-07
F	5.7156655E-11

Other Properties	
ρ (g/cm ³)	4.42
ϵ_r	

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

Thermal Properties	
Tg(°C)	362
Ts(°C)	410
$\alpha_{-40/55^\circ\text{C}} (10^{-7}/\text{K})$	117
$\alpha_{20/120^\circ\text{C}} (10^{-7}/\text{K})$	121
Cp(J/gK)	

Mechanical Properties	
$H_K(20^\circ\text{C}, \text{kgf/mm}^2)$	150
E(GPa)	21.7
G(GPa)	8.5
μ	0.27

Temperature Coefficients of Refractive Index		
Temperature (°C)	$\lambda(\text{nm})$	dn/dt relative (10 ⁻⁶ / °C)
-40~80	1500	
-40~80	2000	70
-40~80	3000	67
-40~80	5000~14000	65

Transmittance	
$\lambda(\text{nm})$	$\tau(2\text{mm})$
20000	0.027
19000	0.053
18000	0.032
17000	0.128
16000	0.503
15000	0.650
14000	0.669
13000	0.622
12000	0.614
11000	0.656
10000	0.702
9500	0.704
9000	0.701
8500	0.702
8000	0.698
7500	0.697
7000	0.694
6500	0.689
6000	0.692
5500	0.692
5000	0.688
4500	0.685
4000	0.685
3500	0.681
3000	0.678
2500	0.684
2000	0.680
1500	0.682
1000	0.663
800	0.550
600	
400	
200	

IR TRANSMITTANCE (2mm)

