

IRG202	Ge22Se58As20
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$n_{10.6}= 2.4925$	$\nu_{10.6}= 102.93$	$n_{8000}-n_{12500}= 0.01450$
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Refractive Indices		
n	2000	2.5265
n	3000	2.5148
n	4000	2.5101
n	5000	2.5072
n	6000	2.5047
n	7000	2.5024
n	8000	2.5000
n	9000	2.4974
n	10000	2.4944
n	11000	2.4911
n	12000	2.4875
n	12500	2.4855
n	13000	2.4835
n	14000	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
ϵ_r	

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

Thermal Properties	
Tg(℃)	282
Ts(℃)	352
$\alpha_{-40/55^{\circ}\text{C}}(10^{-7}/\text{K})$	156
$\alpha_{20/120^{\circ}\text{C}}(10^{-7}/\text{K})$	159
Cp(J/gK)	

Mechanical Properties	
$H_K(20^{\circ}\text{C}, \text{ kgf/mm}^2)$	152
E(GPa)	18.2
G(GPa)	7.1
μ	0.28

Temperature Coefficients of Refractive Index		
Temperature (℃)	$\lambda(\text{nm})$	dn/dt relative (10 ⁻⁶ / ℃)
-40~80	1500	
-40~80	2000	44
-40~80	3000	41
-40~80	5000~14000	40

Transmittance	
$\lambda(\text{nm})$	$\tau(2\text{mm})$
20000	0.009
19000	0.041
18000	0.057
17000	0.181
16000	0.563
15000	0.665
14000	0.669
13000	0.649
12000	0.650
11000	0.678
10000	0.707
9500	0.708
9000	0.706
8500	0.707
8000	0.704
7500	0.703
7000	0.700
6500	0.694
6000	0.699
5500	0.699
5000	0.695
4500	0.687
4000	0.695
3500	0.692
3000	0.692
2500	0.696
2000	0.698
1500	0.694
1000	0.681
800	0.631
600	
400	
200	

IR TRANSMITTANCE (2mm)

