

IRG205	Ge28Se60Sb12
---------------	---------------------

$n_{10.6}= 2.6011$	$\nu_{10.6}= 93.63$	$n_{8000}-n_{12500}= 0.01710$
--------------------	---------------------	-------------------------------

Refractive Indices		
n	2000	2.6423
n	3000	2.6279
n	4000	2.6222
n	5000	2.6186
n	6000	2.6157
n	7000	2.6129
n	8000	2.6100
n	9000	2.6068
n	10000	2.6033
n	11000	2.5994
n	12000	2.5952
n	12500	2.5929
n	13000	2.5905
n	14000	2.5850

Constants of Dispersion Formula	
A	2.6191393E+00
B	8.9681707E-02
C	1.9616489E-02
D	-1.6512236E-04
E	1.7019611E-08
F	-3.7871669E-10

Other Properties	
ρ (g/cm ³)	4.68
ϵ_r	9.71

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

Thermal Properties	
Tg(°C)	285
Ts(°C)	315
$\alpha_{-40/55^{\circ}\text{C}}(10^{-7}/\text{K})$	136
$\alpha_{20/120^{\circ}\text{C}}(10^{-7}/\text{K})$	140
Cp(J/gK)	0.33

Mechanical Properties	
H _K (20°C, kgf/mm ²)	132
E(GPa)	21.9
G(GPa)	8.6
μ	0.27

Temperature Coefficients of Refractive Index		
Temperature (°C)	$\lambda(\text{nm})$	dn/dt relative (10 ⁻⁶ / °C)
-40~80	1500	86
-40~80	2000	78
-40~80	3000	72
-40~80	5000~14000	70

Transmittance	
$\lambda(\text{nm})$	$\tau(2\text{mm})$
20000	0.036
19000	0.083
18000	0.057
17000	0.157
16000	0.496
15000	0.629
14000	0.648
13000	0.569
12000	0.568
11000	0.633
10000	0.681
9500	0.686
9000	0.684
8500	0.685
8000	0.680
7500	0.681
7000	0.679
6500	0.676
6000	0.678
5500	0.679
5000	0.671
4500	0.671
4000	0.675
3500	0.671
3000	0.668
2500	0.676
2000	0.681
1500	0.652
1000	0.602
800	0.002
600	
400	
200	

IR TRANSMITTANCE (2mm)

