

IRG205	Ge28Se60Sb12	$n_{10.6} = 2.6030$	$u_{10.6} = 93.74$	$n_{8000} - n_{12500} = 0.01710$

Refractive Indices		
n	2000	2.6445
n	3000	2.6297
n	4000	2.6239
n	5000	2.6205
n	6000	2.6173
n	7000	2.6144
n	8000	2.6117
n	9000	2.6083
n	10000	2.6052
n	11000	2.6011
n	12000	2.5970
n	12500	2.5946
n	13000	2.5921
n	14000	2.5864

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	
HK(20°C , kgf /mm ²)	132
E(GPa)	21.9
G(GPa)	8.6
μ	0.27

Constants of Dispersion Formula	
A	2.6196200E+00
B	1.0657200E-01
C	-2.1715100E-02
D	-1.4244200E-04
E	-9.2112100E-08
F	-3.0735200E-10

Temperature Coefficients of Refractive Index		
Temperature (°C)	$\lambda(\text{nm})$	dn/dt relative (10 ⁻⁶ / °C)
-40 ~ 80	3000	72
-40 ~ 80	5000	70
-40 ~ 80	8000	70
-40 ~ 80	10000	70
-40 ~ 80	12000	70

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

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
12500	0.568
12000	0.633
11000	0.681
10000	0.686
9500	0.685
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	
300	

红外透过率(2mm)

