

IRG207	Ge10Se50As40	$n_{10.6} = 2.6082$	$u_{10.6} = 142.30$	$n_{8000} - n_{12500} = 0.01130$

Refractive Indices		
n	2000	2.6424
n	3000	2.6280
n	4000	2.6230
n	5000	2.6201
n	6000	2.6177
n	7000	2.6158
n	8000	2.6137
n	9000	2.6118
n	10000	2.6096
n	11000	2.6072
n	12000	2.6042
n	12500	2.6024
n	13000	2.6003
n	14000	2.5950

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

Thermal Properties	
Tg(°C)	220
Ts(°C)	277
$\alpha_{40/55^{\circ}\text{C}} (10^{-7}/\text{K})$	
$\alpha_{20/120^{\circ}\text{C}} (10^{-7}/\text{K})$	200
Cp(J/gK)	0.37

Mechanical Properties	
HK(20°C , kgf /mm ²)	126
E(GPa)	
G(GPa)	
μ	

Constants of Dispersion Formula	
A	2.6208859E+00
B	6.7703349E-02
C	8.0611471E-02
D	-1.6305540E-04
E	7.3438627E-07
F	-2.9828106E-09

Temperature Coefficients of Refractive Index		
Temperature (°C)	$\lambda(\text{nm})$	dn/dt relative (10 ⁻⁶ / °C)
-40 ~ 80	3000	18
-40 ~ 80	5000	17
-40 ~ 80	8000	17
-40 ~ 80	10000	17
-40 ~ 80	12000	

Other Properties	
ρ (g/cm ³)	4.49
ϵ_r	

Transmittance	
$\lambda(\text{nm})$	$\tau(2\text{mm})$
20000	0.015
19000	0.074
18000	0.188
17000	0.371
16000	0.618
15000	0.644
14000	0.635
13000	0.589
12500	0.598
12000	0.652
11000	0.682
10000	0.683
9500	0.681
9000	0.678
8500	0.679
8000	0.674
7500	0.674
7000	0.672
6500	0.668
6000	0.667
5500	0.667
5000	0.663
4500	0.660
4000	0.660
3500	0.656
3000	0.654
2500	0.650
2000	0.651
1500	0.653
1000	0.612
800	0.399
600	
400	
300	

红外透过率(2mm)

