IRG205	Ge28Se60Sb12

$n_{10.6}$= 2.6011	$\upsilon_{10.6}$= 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
εr	9.71

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

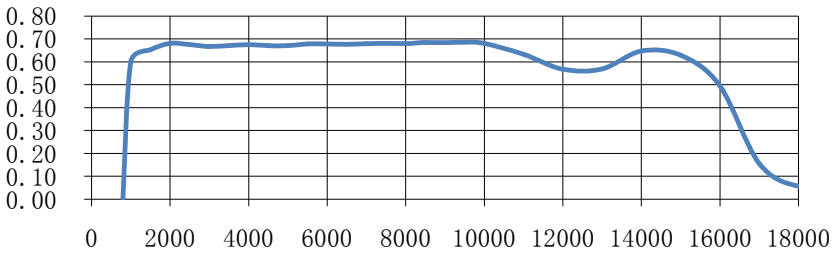
Thermal Properties	
Tg(℃)	285
Ts(℃)	315
$\alpha_{-40/55℃}$(10^{-7}/K)	136
$\alpha_{20/120℃}$(10^{-7}/K)	140
Cp(J/gK)	0.33

Mechanical Properties	
H_K(20℃， kgf /mm^2)	132
E(GPa)	21.9
G(GPa)	8.6
μ	0.27

Temperature Coefficients of Refractive Index		
Temperature (℃)	λ(nm)	dn/dt relative (10^{-6} / ℃)
-40～80	1500	86
-40～80	2000	78
-40～80	3000	72
-40～80	5000～14000	70

Transmittance	
λ(nm)	τ(2mm)
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	

红外透过率(2mm)



IRG207	**Ge10Se50As40**

$n_{10.6}$= 2.6075	$\upsilon_{10.6}$= 154.57	n_{8000}-n_{12500}= 0.01040

Refractive Indices		
n	2000	2.6418
n	3000	2.6271
n	4000	2.6219
n	5000	2.6190
n	6000	2.6168
n	7000	2.6149
n	8000	2.6130
n	9000	2.6110
n	10000	2.6089
n	11000	2.6066
n	12000	2.6040
n	12500	2.6026
n	13000	2.6011
n	14000	2.5976

Constants of Dispersion Formula	
A	2.6183123E+00
B	8.1664287E-02
C	5.3106591E-02
D	-1.1005200E-04
E	1.4671605E-07
F	-6.8842703E-10

Other Properties	
ρ（g/cm^3）	4.49
εr	

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

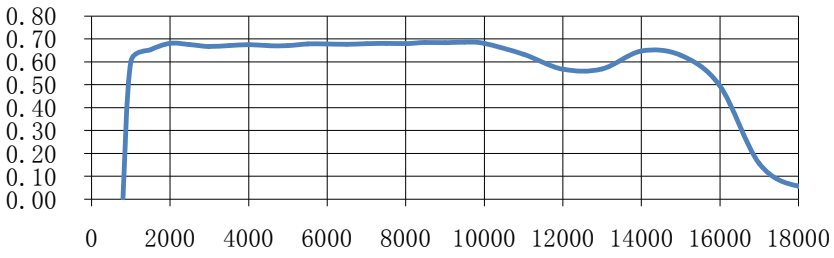
Thermal Properties	
Tg(℃)	220
Ts(℃)	277
$\alpha_{-40/55℃}$(10^{-7}/K)	
$\alpha_{20/120℃}$(10^{-7}/K)	200
Cp(J/gK)	0.37

Mechanical Properties	
H_K(20℃， kgf /mm^2)	126
E(GPa)	
G(GPa)	
μ	

Temperature Coefficients of Refractive Index		
Temperature (℃)	λ(nm)	dn/dt relative (10^{-6} / ℃)
-40～80	1500	28.8
-40～80	2000	22.4
-40～80	3000	18.2
-40～80	5000～14000	17.4

Transmittance	
λ(nm)	τ(2mm)
20000	0.015
19000	0.074
18000	0.188
17000	0.371
16000	0.618
15000	0.644
14000	0.635
13000	0.589
12000	0.598
11000	0.652
10000	0.682
9500	0.683
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	
200	

红外透过率(2mm)



IRG204	**Se63As30Sb4Sn3**

$n_{10.6}$= 2.7659	$\upsilon_{10.6}$= 132.77	n_{8000}-n_{12500}= 0.01330

Refractive Indices		
n	2000	2.8095
n	3000	2.7914
n	4000	2.7846
n	5000	2.7808
n	6000	2.7779
n	7000	2.7754
n	8000	2.7730
n	9000	2.7704
n	10000	2.7677
n	11000	2.7647
n	12000	2.7614
n	12500	2.7597
n	13000	2.7578
n	14000	2.7538

Constants of Dispersion Formula	
A	2.7790481E+00
B	1.1911498E-01
C	1.5043403E-02
D	-1.2268557E-04
E	-1.0906501E-08
F	-1.8517301E-10

Other Properties	
ρ（g/cm^3）	4.72
εr	

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

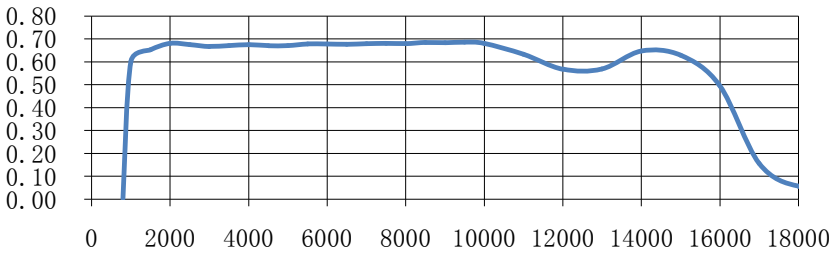
Thermal Properties	
Tg(℃)	167
Ts(℃)	207
$\alpha_{-40/55℃}$(10^{-7}/K)	203
$\alpha_{20/120℃}$(10^{-7}/K)	213
Cp(J/gK)	

Mechanical Properties	
H_K(20℃， kgf /mm^2)	115
E(GPa)	18.8
G(GPa)	7.3
μ	0.29

Temperature Coefficients of Refractive Index		
Temperature (℃)	λ(nm)	dn/dt relative (10^{-6} / ℃)
-40～80	1500	
-40～80	2000	26
-40～80	3000	21
-40～80	5000～14000	19

Transmittance	
λ(nm)	τ(2mm)
20000	0.003
19000	0.119
18000	0.450
17000	0.574
16000	0.614
15000	0.608
14000	0.610
13000	0.648
12000	0.663
11000	0.672
10000	0.675
9500	0.674
9000	0.670
8500	0.670
8000	0.669
7500	0.667
7000	0.662
6500	0.647
6000	0.660
5500	0.662
5000	0.661
4500	0.661
4000	0.658
3500	0.656
3000	0.654
2500	0.654
2000	0.651
1500	0.644
1000	0.583
800	
600	
400	
200	

红外透过率(2mm)



IRG203	Ge20Se65Sb15

$n_{10.6}$= 2.5837	$\upsilon_{10.6}$= 86.07	n_{8000}-n_{12500}= 0.01840

Refractive Indices		
n	2000	2.6261
n	3000	2.6118
n	4000	2.6060
n	5000	2.6024
n	6000	2.5993
n	7000	2.5963
n	8000	2.5933
n	9000	2.5899
n	10000	2.5862
n	11000	2.5820
n	12000	2.5774
n	12500	2.5749
n	13000	2.5723
n	14000	2.5666

Constants of Dispersion Formula	
A	2.6027335E+00
B	9.4148223E-02
C	5.0288851E-03
D	-1.6360399E-04
E	-1.1188941E-07
F	-3.3257266E-11

Other Properties	
ρ（g/cm^3）	4.71
εr	10.11

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

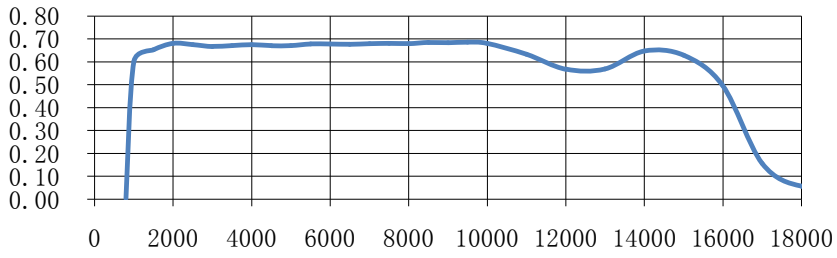
Thermal Properties	
Tg(℃)	266
Ts(℃)	304
$\alpha_{-40/55℃}$(10^{-7}/K)	157
$\alpha_{20/120℃}$(10^{-7}/K)	165
Cp(J/gK)	

Mechanical Properties	
H_K(20℃， kgf /mm^2)	137
E(GPa)	20
G(GPa)	7.8
μ	0.28

Temperature Coefficients of Refractive Index		
Temperature (℃)	λ(nm)	dn/dt relative (10^{-6} / ℃)
-40～80	1500	
-40～80	2000	45
-40～80	3000	42
-40～80	5000～14000	40

Transmittance	
λ(nm)	τ(2mm)
20000	0.009
19000	0.129
18000	0.080
17000	0.149
16000	0.525
15000	0.637
14000	0.657
13000	0.589
12000	0.585
11000	0.638
10000	0.678
9500	0.682
9000	0.678
8500	0.678
8000	0.674
7500	0.675
7000	0.671
6500	0.666
6000	0.669
5500	0.670
5000	0.668
4500	0.663
4000	0.665
3500	0.661
3000	0.660
2500	0.662
2000	0.672
1500	0.676
1000	0.651
800	0.326
600	
400	
200	

红外透过率(2mm)



IRG201	**Ge33Se55As12**

$n_{10.6}$= 2.4940	$\upsilon_{10.6}$= 95.77	n_{8000}-n_{12500}= 0.01560

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
εr	

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

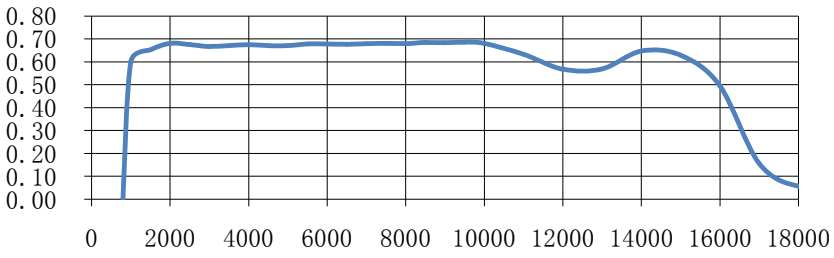
Thermal Properties	
Tg(℃)	362
Ts(℃)	410
$\alpha_{-40/55℃}$(10^{-7}/K)	117
$\alpha_{20/120℃}$(10^{-7}/K)	121
Cp(J/gK)	

Mechanical Properties	
H_K(20℃， kgf /mm^2)	150
E(GPa)	21.7
G(GPa)	8.5
μ	0.27

Temperature Coefficients of Refractive Index		
Temperature (℃)	λ(nm)	dn/dt relative (10^{-6} / ℃)
-40～80	1500	
-40～80	2000	70
-40～80	3000	67
-40～80	5000～14000	65

Transmittance	
λ(nm)	τ(2mm)
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	

红外透过率(2mm)



IRG202	Ge22Se58As20

$n_{10.6}$= 2.4925	$\upsilon_{10.6}$= 102.93	n_{8000}-n_{12500}= 0.01450

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
εr	

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

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

Mechanical Properties	
H_K(20℃， kgf /mm^2)	152
E(GPa)	18.2
G(GPa)	7.1
μ	0.28

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

Transmittance	
λ(nm)	τ(2mm)
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	

红外透过率(2mm)