

AGIR-2 DATA SHEET Ge₃₃Se₅₅As₁₂

MECHANICAL PROPERTIES

HK (10 ⁷ Pa)	150
E (GPa)	22.0
G (GPa)	8.3
μ	0.33

THERMAL PROPERTIES

T _g (°C)	369
T _s (°C)	409
$\alpha_{-60/120^\circ\text{C}}$ (10 ⁻⁷ /K)	123
$\alpha_{20/120^\circ\text{C}}$ (10 ⁻⁷ /K)	123
C _p (J/g-k)	

TEMPERATURE COEFFICIENTS OF REFRACTIVE INDEX

λ (μm)	dn_{rel}/dt
3	67
5	65
8	64
10	62
12	62

OPTICAL PROPERTIES

Refractive Index	
λ (μm)	n_λ
2.0	2.5293
3.0	2.5175
4.0	2.5127
5.0	2.5097
6.0	2.5072
7.0	2.5047
8.0	2.5021
9.0	2.4993
10.0	2.4961
11.0	2.4926
12.0	2.4886
12.5	2.4865
13.0	2.4843
14.0	2.4794

Internal Transmittance	
λ (μm)	τ mm
17.0	0.814
16.0	0.722
15.0	0.917
14.0	0.943
13.0	0.887
12.5	0.883
12.0	0.933
11.0	0.991
10.0	0.999
9.5	0.999
9.0	0.999
8.5	0.999
8.0	0.999
7.5	0.999
7.0	0.999
6.5	0.999
6.0	0.999
5.5	0.999
5.0	0.995
4.5	0.993
4.0	0.998
3.5	0.998
3.0	0.999
2.5	0.997
2.0	0.998
1.5	0.993
1.0	0.989