

**Silizium
für IR-Bereich**

**Silicon
for IR-range**

Formula	Si						
Growth method	Czochalski technique						
Max. sizes, (mm)	Ø150						
Transmission range, (µm) (Thickness 2 mm)	1.2 - 15.0						
Structure	cubic						
Density (g/cm ³)	2.329						
Melting point (°C)	1410						
Hardness (Mohs)	7						
Thermal expansion coefficient (10 ⁻⁶ /K)	2.3						
Thermal conductivity (W m ⁻¹ K ⁻¹)	147						
Specific heat capacity (J kg ⁻¹ K ⁻¹)							
Solubility in water (g/100 cm ³)	0.005						
Solubility in acids	soluble						
Solubility in organic solvents	insoluble						
Wavelength (µm)	3.0	5.0	6.0	7.0	8.0	10.0	3.432
Absorption coefficient (cm ⁻¹)	3.422	3.420	3.419	3.418	3.417	0.01 at 5 µm	

Transmission spectrum:

