

## PROPERTIES of SILICON (Si)

### MECHANICAL PROPERTIES

Young Modulus	: 131 GPa
Shear Modulus	: 64.1 GPa
Rupture Modulus, at 25°C	: 62 MPa
Mohs Hardness	: 7
Poisson's Ratio	: 0.28

### THERMAL PROPERTIES

Melting Point	: 1410°C
Boiling Point	: 2355°C
Thermal Expansion Coefficient	: $2.6 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$

### ELECTRICAL PROPERTIES

Dielectric Constant	: 11.8 at 1 MHz
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### OPTICAL PROPERTIES

Trasmission	: 1,2...10 $\mu\text{m}$ and 48...100 $\mu\text{m}$
Refractive Index	: 3.42 at 10 $\mu\text{m}$

### TRASMISSION CURVA (2mm thick)

