

SILICON

MONOCRYSTAL, CZ GROWN ROHS & REACH COMPLIANT

Physical properties

DENSITY	2.33 g/cm ³
STRUCTURE	cubic
COMPOSITION	Si 99.9% doped Boron (p-typed)

Thermal properties

MELTING POINT	1420 °C
SPECIFIC HEAT	703 jK ⁻¹ kg ⁻¹
CONDUCTIVITY	163.3 W m ⁻¹ K ⁻¹ at 273 K
EXPANSION	2.6 x 10 ⁻⁶ /at 20°C

Mechanical properties

HARDNESS	Knoop 1150 Mohs 7
POISSON'S RATIO	0.266
YOUNG'S MODULUS	131 MPa

Chemical properties

ACID	
ALKALI	
WATER	no absorbtion

Optical properties

REFRACTION INDEX	3.42
TRANSMISSION RANGE	1.2 to 15 um