

Ge(Germanium) Single Crystals and Wafers

General Properties

General Properties Structure	Cubic, a = 5.6754 Å Density: 5.765 g/cm ³ Melting Point: 937.4 °C Thermal Conductivity: 640		
Crystal Growth Technology	Czochralski		
Doping available	Undoped	Sb Doping	Doping In or Ga
Conductive Type	/	N	P
Resistivity, cm⁻¹	>35	< 0.05	0.05 - 0.1
EPD	< 4x10 ³ /cm ²	< 4x10 ³ /cm ²	< 4x10 ³ /cm ²

Crystal Grades and Application

(please specify when you order) Electronic Grade	Used for diodes and transistors
Infrared Grade	Used for IR optical window
Cell Grade	Used for substrates of solar cell

Standard Specs of Ge Crystal and wafers

Crystal Orientation	<111>,<100> and <110> ± 0.5° or custom orientation			
Crystal boule as grown	1" ~ 5" diameter x 200 mm Length			
Standard blank as cut	1"x 0.5mm	2"x0.6mm	4"x0.7mm	5"&6"x0.8mm
Standard Polished wafer(One/two sides polished)	1"x 0.30 mm	2"x0.5mm	4"x0.5mm	5"&6"x0.6mm

Special size and orientation are available upon requested Wafers