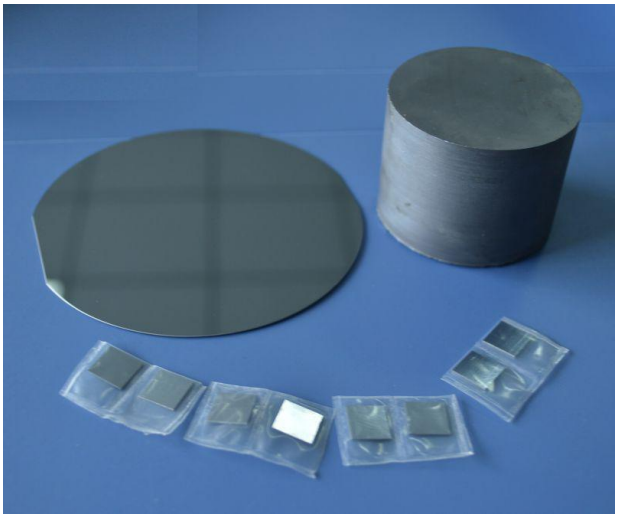
CASCRYSTECH 中科瑞晶

Silicon (Si)

Crystalline silicon material is the most important photovoltaic material, and its properties are gray black with metallic luster, high melting point (1410 ℃), high hardness, brittleness and inactive chemical properties at room temperature. Its market share is more than 90%, and it will still be the mainstream material of solar cells for a long time in the future.



PARAMETERS

Crystal Structure	Cubic		
Melting Point	1420℃		
Density	2.4（g/cm^3）		
Dopant	Undoped	Boron	Phosphorus
Conduction Type	I	P	N
Resistivity	1000Ωcm	10^{-3}~1000Ωcm	10^{-3}~1000Ωcm
EPD	≤100/cm^2	≤100/cm^2	≤100/cm^2
Oxygen Content（/cm^3）	≤1~1.8×10^{18}	≤1~1.8×10^{18}	≤1~1.8×10^{18}
Carbon Content（/cm^3）	≤5×10^{16}	≤5×10^{16}	≤5×10^{16}
Dimension	5x5mm ,10×10mm, 20×20mm Ø50.8mm, Ø76.2mm, Ø100mm According to customer needs, substrates with special orientation and size can be customized.		
Thickness	0.5mm、1.0mm		
Dimension Tolerance	<±0.1mm		
Thickness Tolerance	<±0.025mm		
Polishing	One side or two sides		
Orientation Tolerance	±0.5°		
Edge Orientation Accuracy	2° (Special requirements can reach within 1°)		
Orientation	<100>、<110>、<111>		
Package	Class 100 clean bag, Class 1000 super clean room		