

ZnS – Zinc Sulfide

DESCRIPTIVE PROPERTIES

Structure formula:	ZnS
Crystal structure:	cubic
Crystal axis:	(111)
Orientation:	(100); (110); (111) ±30 arc minutes. Other orientations available on request.
Production method:	Markov
Lattice parameters, Å	a = 5.4093
Specific resistivity, Ohm cm	
undoped:	1×10 ⁸ ...1×10 ¹²
doped:	—
Hall mobility, cm²/V/sec	140(e)
EPD, cm⁻¹	< 5×10 ⁵
Density of low angle boundaries, cm⁻¹	—
Twins and stacking faults	< 4% of hexagonal phase
Orientation accuracy:	max. 1°; typ. < 0.5°
Standard wafer sizes:	5 mm x 5 mm, 10 mm x 10 mm and round ø40 mm
Max. sizes of wafers (at thickness 1mm):	10 mm x 10 mm, ø30 mm for (111) 10 mm x 10 mm for (100) and (110)
Standard thickness:	0.5 mm or 1 mm
Tolerances	
Width/Length:	± 0.050 mm
Diameter:	+ 0.000 mm / -0.100 mm
Thickness:	± 0.050 mm
Polishing:	One side or both sides polished Optical Polishing Chemical mechanical polishing

Other sizes and specifications on request.

