Gallium Antimonide Single Crystal Wafers

Specifications

Growth Method	LEC		
Orientation	(100), (111), (211) and (311)±0.5°, or customer required		
Conduction Type	N	P	
Dopant	Te	None	Zn
Carrier Concentration (cm^{-3}) **	$(2\text{-}10)\times10^{17}$	$(1\text{-}2)\times10^{17}$	$(3\text{-}10)\times10^{17}$
Mobility ($cm^2/v.s$)	$(1.5\text{-}3.6)\times10^{3}$	$(6\text{-}8)\times10^{2}$	$(5\text{-}7)\times10^{2}$
Resistivity (Ω·cm)	$(0.2\text{-}1.2)\times10^{-2}$	$(5\text{-}8)\times10^{-2}$	
Shape	Round		
Diameter (mm)	50.8±.04 (2")	76.2±.04 (3")	101.6±.04 (4")
Thickness (μm)	500±25	600±25	700±25
Primary Flat Length (mm)	16±1	22±1	32.5±1
Secondary Flat Length (mm)	7±1	12±1	18±1
EPD (cm^{-2})	≤1000	≤2000	≤3000
Surface Finish	S/S – both sides as sliced L/L – both sides as lapped P/S – one side polished, other side as sliced P/E – one side polished, other side etched P/P – both sides polished		
Package	Wafer individually packaged in a fluoroware container with spider		
TV (for polished wafer) (μm)	≤20		
Warp (for polished wafer) (μm)	≤15		

** We also provide low carrier concentration P-type and N-type 2", 3" and 4" single crystal wafers.
P-type: 10^{15} - 10^{17} cm^{-3}
N-type: 10^{15} - 10^{16} cm^{-3}