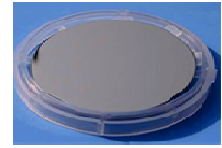




## Indium Antimonide (InSb) Substrate

**Indium Antimonide (InSb) Substrate**, compound by high purity Indium and Antimony elements, grown by Liquid Encapsulated Czochralski (LEC) method, has been a perfect substrate for the fabrication of infrared detector devices between 3-5  $\mu\text{m}$  microwave and improvement of quantum efficiency. 2" and 3" are available.



No.	Items	Standard Specifications	
		2"	3"
1	Size	2"	3"
2	Diameter mm	50.5±0.5	76.2±0.5
3	Growth Method	LEC	LEC
4	Conductivity	P/Ge-doped, N/(Te-doped or un-doped)	
5	Orientation	(100)±0.5°, (111)±0.5°	
6	Thickness $\mu\text{m}$	500±25	600±25
7	Orientation Flat mm	16±2	22±2
8	Identification Flat mm	8±1	11±1
9	Mobility $\text{cm}^2/\text{v.s}$	8000-40000	
10	Carrier Concentration $\text{cm}^{-3}$	<3E14, (4-50)E14, (1-10)E17	
11	TTV $\mu\text{m max}$	10	10
12	Bow $\mu\text{m max}$	10	10
13	Warp $\mu\text{m max}$	10	10
14	Dislocation Density $\text{cm}^{-2} \text{ max}$	100	100
15	Surface Finish	P/E, P/P	P/E, P/P
16	Packing	Single wafer container sealed in Aluminum bag.	

## Indium Phosphide (InP) Substrate

**Indium Phosphide (InP) Substrate**, compound by high purity Indium and Phosphorus elements, grown by Vertical Gradient Freeze (VGF) method, is widely used for Optoelectronic industries, such as micro-wave or optical-fiber communication, satellite navigation and so on. 2" 3" and 4" are available.



No.	Items	Standard Specifications		
		2"	3"	4"
1	Size	2"	3"	4"
2	Diameter mm	50.8±0.5	76.2±0.5	100±0.5
3	Growth Method	VGF	VGF	VGF
4	Conductivity	P/Zn-doped, N/(S-doped or un-doped), Semi-insulating		
5	Orientation	(100)±0.5°, (111)±0.5°		
6	Thickness $\mu\text{m}$	350±25	600±25	600±25
7	Orientation Flat mm	16±2	22±1	32.5±1
8	Identification Flat mm	8±1	11±1	18±1
9	Mobility $\text{cm}^2/\text{v.s}$	50-70, >2000, (1.5-4)E3		
10	Carrier Concentration $\text{cm}^{-3}$	(0.6-6)E18, ≤3E16		
11	TTV $\mu\text{m max}$	10	10	10
12	Bow $\mu\text{m max}$	10	10	10
13	Warp $\mu\text{m max}$	15	15	15
14	Dislocation Density $\text{cm}^{-2} \text{ max}$	500	1000	2000
15	Surface Finish	P/E, P/P	P/E, P/P	P/E, P/P
16	Packing	Single wafer container sealed in Aluminum bag.		