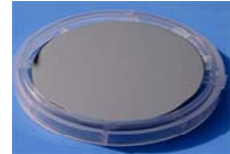




## Silicon Crystal & Compound Semiconductor

### Indium Antimonide (InSb) Substrate

**Indium Antimonide (InSb) Substrate** is compound by high purity Indium and Antimony elements, grown by Liquid Encapsulated Czochralski ( LEC ) method, with the narrowest band gap and the highest hall mobility among all III-V compound semiconductors, it has been a perfect substrate especially for manufacturing of infrared detector devices between 3-5  $\mu\text{m}$  microwave and improving quantum efficiency. It has a promising future in Aeronautics and Astronautics, medical science and meteorology civil applications.



No.	Items	Standard Specifications		
1	Size	2"	3"	
2	Diameter	mm	50.8±0.5	76.2±0.5
3	Growth Method	LEC		
4	Conductivity	P/N		
5	Orientation	<100>, <111>		
6	Thickness	$\mu\text{m}$	500±25	600±25
7	Flats Option	EJ or as per SEMI		
8	Orientation Flat	mm	16±2	22±2
9	Identification Flat	mm	8±1	11±1
10	Hall Mobility	$\text{cm}^2/\text{v.s}$	4E3-25E4 or as required	
11	Carrier Concentration	$\text{atoms}/\text{cm}^3$	5E4-1E17 or as required	
12	TTV	$\mu\text{m}$ max	10	10
13	Bow	$\mu\text{m}$ max	10	10
14	Warp	$\mu\text{m}$ max	10	10
15	EPD	$\text{cm}^{-2}$ max	5E4	5E4
16	Surface Finish	P/E, P/P, E/E		
17	Packing	Single wafer container inside, carton box outside.		