

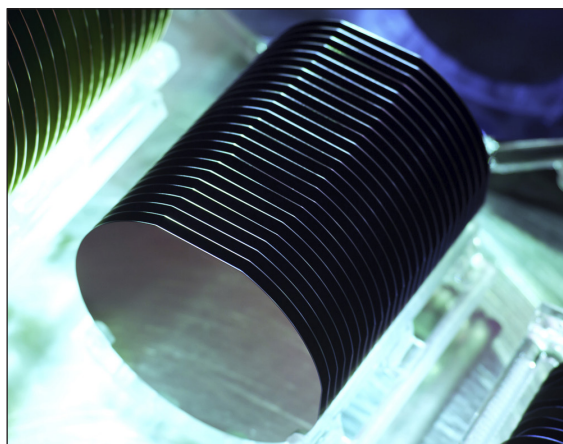
# Indium Antimonide

Single Crystal InSb Substrates

Galaxy Compound Semiconductors, Inc. offers single crystal wafers that are grown by a modified Czochralski method from highly purified, zone refined polycrystalline ingots.

## MECHANICAL SPECIFICATIONS

Indium Antimonide (InSb) can be supplied as wafers with as-cut, etched or polished finishes and are available in a wide range of carrier concentration, diameter and thickness.



## PACKAGING

### Polished Wafers

Coin-style wafer shipper, individually sealed in two outer bags in inert atmosphere. Cassette shipments are available on request.

### As-cut Wafers

Cassette shipment (Glassine bag available on request).

### Mechanical wafers

Coin-style wafer shipper, individually sealed in one outer bag.

Other forms of packaging are available upon request, please contact us to discuss your requirements.

## Wafer Specifications

Diameter Slices	2"	3"	4"	5"
Orientation	(111) A or B, (100) ± 0.1°	(111) A or B, (100) ± 0.1°	(111) A or B, (100) ± 0.1°	(111) A or B, (100) ± 0.1°
	Misorientations up to 10° in any direction are available. For other orientations please ask.			
Diameter	50.5 ± 0.5mm	76.2 ± 0.5mm	100.00 ± 0.5mm	125.00 ± 0.5mm
Flat Option	2 flats at 120°	2 flats at 120°	2 flats at 120°	2 flats at 120°
Flat Orientation Tolerance	± 0.5°	± 0.5°	± 0.5°	± 0.5°
Major Flat Length	16 ± 2mm on (0-1-1)	22 ± 2mm on (0-1-1)	32.5 ± 2.5mm on (0-1-1)	42.0 ± 2.5mm on (0-1-1)
Minor Flat Length	8 ± 1mm on (0-11)	11 ± 1mm on (0-11)	18 ± 1mm on (0-11)	25 ± 2mm on (0-11)
Thickness	625 ± 25µm	800 ± 25µm	850 ± 25µm	900 ± 50µm

## Flatness Specifications

	2"	3"	4"	5"
p-v Front Surface Flatness (µm)	<5	<5	<5	<7
Total Thickness Variation (TTV, µm)	<5	<5	<10	<10

## Bulk Specifications

Dopant	Type	Carrier Concentration cm <sup>-3</sup> at 77K	Mobility cm <sup>-2</sup> V <sup>-1</sup> s <sup>-1</sup>	E.P.D. cm <sup>-2</sup>
Undoped	n-type	8x10 <sup>13</sup> -3x10 <sup>14</sup>	≥4x10 <sup>2</sup>	≤50
Tellurium	n-type	1x10 <sup>14</sup> -4x10 <sup>18</sup>	≥2x10 <sup>2</sup>	≤50 (≤100 for 5")

Other wafer characteristics are available on request. Please call for details on 509.892-1114 or email info@galaxy.com.



Galaxy Compound Semiconductors, Inc.  
9922 East Montgomery Avenue, #7 Spokane, WA 99206  
Tel: 509.892-1114 Fax: 509.892-1116  
info@galaxywafer.com www.galaxywafer.com



www.iqep.com  
Galaxy Compound Semiconductors  
is a division of IQE plc.

