

Part Number

Customer

Category	Parameter	Specification	Measurement Method
OverallWafer	1.0 Diameter	100.00 +/- 0.50 mm	
	2.0 Primary Flat Orientation	{110} +/- 0.5 degree	Wafer Vendor
	3.0 Primary Flat Length	32.50 +/- 2.50 mm	Wafer Vendor
	4.0 Secondary Flat Orientation	semi std or none	
	5.0 Overall Thickness	505.00 +/- 10.00 $\mu$ m	ADE, 100%
	6.0 Total Thickness Variation (TTV)	<5.00 $\mu$ m	Guaranteed by Process
	7.0 Bow	<60.00 $\mu$ m	ADE to ASTM F534, 20%
	8.0 Warp	<60.00 $\mu$ m	ADE to ASTM F657, 20%
	9.0 Edge Chips	0	Bright Light, 100% (note 2)
	10.0 Edge Exclusion	5mm	
HandleSilicon	11.0 Handle Growth Method	CZ	Wafer Vendor
	12.0 Handle Orientation	{111} off 2.5 degree +/- 0.5 degree	Wafer Vendor
	13.0 Handle Carbon Concentration	< 2 e16 at/cm3	Wafer Vendor
	14.0 Handle Thickness	400.00 +/- 5.00 $\mu$ m	ADE, 100%
	15.0 Handle Doping Type	N	Wafer Vendor
	16.0 Handle Dopant	Arsenic	Wafer Vendor
	17.0 Handle Resistivity	<0.003 Ohmcm	Wafer Vendor
	18.0 Backside Finish	Lapped and etched with oxide and lasermark	Wafer Vendor
DeviceSilicon	22.0 Device Growth Method	FZ	Wafer Vendor
	23.0 Device Orientation	{111} off 3.5 degree +/- 0.5 degree	Wafer Vendor
	24.0 Nominal Thickness	80.00 +/- 1.00 $\mu$ m	FTIR, 100% 9-Pt (note3)
	25.0 Distance to device silicon edge from wafer edge	<= 3mm	Typical by Process
	26.0 Device Doping Type	N	Wafer Vendor
	27.0 Device Dopant	Phosphorous	Wafer Vendor
	28.0 Device Resistivity	> 5000 Ohm-cm	Wafer Vendor
	29.0 Buried Layer Implant	none	implant vendor
DeviceSilicon 2	30.0 Device 2 Growth Method	CZ	Wafer Vendor
	31.0 Carbon Concentration 2	< 2 e16 at/cm3	Wafer Vendor
	31.2 Device 2 Doping Type	P	
	31.4 Device 2 Dopant	Boron	
	32.0 Device 2 Orientation	<111> off 2.5 +/- 2 degree	Wafer Vendor
	33.0 Device 2 Nominal Thickness	25.00 +/- 1.00 $\mu$ m	FTIR 100%, 9pt meas. (ex transition)
	34.0 Device 2 Resistivity	< 0.009 Ohmcm	Wafer Vendor
	35.0 Distance to Device 2 edge from wafer edge	< 5mm	Guaranteed by Process
DeviceSilicon	36.0 Voids	0	Bright Light, 100% (note 2)
	37.0 Scratches	0	Bright Light, 100% (note 2)

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Parameter

Specification

Measurement Method

DeviceSilicon

38.0

Haze

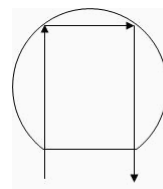
none

Bright Light, 100% (note 2)

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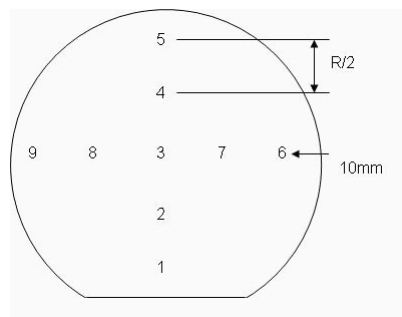
Shipping Details	Wafer per box :	Max 25
	Packaging :	Taped Polypropylene Wafer Box Empak, Ultrapak, 100.00mm Antistatic Double Bagging
	Lot Shipment Data	Device Thickness Bow / Warp Data Handle and SOI Thickness



Explanatory Notes 1. Microscope inspection performed using microscope scan as below. 5x objective.

2. All bright light inspections performed exclude all wafer area outside the edge exclusion defined in Overall Wafer, Edge Exclusion. High intensity bright lamp inspection as per ASTM F523.

3. 9 point measurement are as shown in the diagram below:



Additional Information