

Part Number 54401

Customer icemos

Category	Parameter	Specification	Measurement Method
OverallWafer	1.0	Diameter	150.00 +/- 0.20 mm
	2.0	Primary Flat Orientation	{110} +/- 0.5 degree
	3.0	Primary Flat Length	47.50 +/- 2.50 mm
	4.0	Secondary Flat Orientation	none
	5.0	Overall Thickness	625.00 +/- 5.00 µm
	6.0	Total Thickness Variation (TTV)	<5.00µm
	6.5	Flatness (SBIR)	<1.00um
	7.0	Bow	<60.00µm
	8.0	Warp	<60.00µm
	9.0	Edge Chips	0
	10.0	Edge Exclusion	3mm
HandleSilicon	11.0	Handle Growth Method	CZ
	11.5	Handle Oxygen Concentration	6.5e17 atcm-3 - 8.5e17 atcm-3 new ASTM
	11.6	Handle Carbon Concentration	< 2e16 atcm-3 new ASTM
	12.0	Handle Orientation	{100} +/- 0.5 degree
	13.0	Handle Thickness	573.00 +/- 5.00 µm
	14.0	Handle Doping Type	N
	15.0	Handle Dopant	Phosphorous
	16.0	Handle Resistivity	1.5 - 6.5 Ohmcm
	17.0	Backside Finish	Lapped and Etched with 2um oxide and lasermark (see lasermark spec below)
BuriedOxide	18.0	Oxide Type	Thermal
	19.0	Oxide Thickness	20,000.00 +/- 1,000.00 A
	19.5	Oxide formed on	Handle Wafer
DeviceSilicon	20.0	Device Growth Method	FZ
	20.5	Oxygen Concentration	n/a
	20.6	Carbon Concentration	< 2e16 atcm-3 new ASTM
	21.0	Device Orientation	{100} +/- 0.5 degree
	22.0	Nominal Thickness	50.00 +/- 1.00 µm
	23.0	Distance to device silicon edge from wafer edge	<= 1.5mm
	24.0	Device Doping Type	N
	25.0	Device Dopant	Phosphorous
	26.0	Device Resistivity	20.7 - 25.3 Ohm-cm
	26.5	Buried Layer Implant	As, 80keV, 3e15 (25nm scrn ox used)
	28.0	Voids	0

Part Number 54401

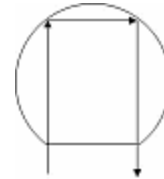
Customer icemos

Category	Parameter	Specification	Measurement Method	
DeviceSilicon	29.0	Scratches	< 25mm total length	Bright Light, 100% (note 2)
	30.0	Haze	none	Bright Light, 100% (note 2)

Part Number 54401	Customer icemos
-------------------	-----------------

Category	Parameter	Specification	Measurement Method
----------	-----------	---------------	--------------------

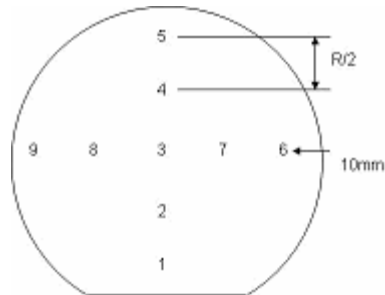
Shipping Details	Wafer per box :	Max 25
	Packaging :	Taped Polypropylene Wafer Box Empak, Ultrapak, 150.00mm Antistatic Double Bagging
	Lot Shipment Data	Device Thickness Bow / Warp Data Handle and SOI Thickness



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

lasermark detail =  
YYMMXXXIT.5250.