

Part Number

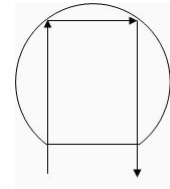
Customer

| Category      | Parameter   | Specification                                   | Measurement Method  |                             |
|---------------|-------------|---|---|-----------------------------|
| OverallWafer  | 1.0         | Diameter  | 150.00 +/- 0.50 mm  | Wafer Vendor                |
|               | 2.0         | Primary Flat Length                             | 57.50 +/- 2.50 mm   | Wafer Vendor                |
|               | 3.0         | Primary Flat Orientation                        | <110> +/- 0.5 degree                                      | Wafer Vendor                |
|               | 4.0         | Secondary Flat Length                           | None  | Wafer Vendor                |
|               | 5.0         | Overall Thickness                               | 420.50 +/- 7.00 $\mu$ m                                   | ADE, 100%                   |
|               | 6.0         | Total Thickness Variation (TTV)                 | <2.00 $\mu$ m   | Guaranteed by Process       |
|               | 7.0         | Bow   | <80.00 $\mu$ m  | ADE to ASTM F534, 20%       |
|               | 8.0         | Warp  | <80.00 $\mu$ m  | ADE to ASTM F657, 20%       |
|               | 9.0         | Edge Chips                                      | none  | Bright Light, 100%          |
|               | 10.0        | Edge Exclusion                                  | 5mm   |                             |
|               | 11.0        | Wafer Oxygen concentration                      | <20 ppm   | Wafer Vendor                |
| HandleSilicon | 12.0        | Handle Growth Method                            | CZ or MCZ   | Wafer Vendor                |
|               | 13.0        | Handle Orientation                              | {100} +/- 0.5 degree                                      | Wafer Vendor                |
|               | 14.0        | Handle Thickness                                | 380.00 +/- 5.00 $\mu$ m                                   | ADE, 100%                   |
|               | 15.0        | Handle Doping Type                              | N   | Wafer Vendor                |
|               | 16.0        | Handle Dopant                                   | Phosphorus  | Wafer Vendor                |
|               | 17.0        | Handle Resistivity                              | 1 ~ 10 Ohm cm   | Wafer Vendor                |
|               | 18.0        | Backside Finish                                 | Polished with oxide, laser mark, and light handling marks | Guaranteed by process       |
|               | BuriedOxide | 19.0  | Oxide Type  | Thermal                     |
| 20.0          |             | Oxide Thickness                                 | 5,000.00 +/- 1,000.00 A                                   | Nanospec centre point, 4%   |
| 21.0          |             | Oxide formed on                                 | Handle and/or Device Wafer                                |                             |
| DeviceSilicon | 22.0        | Device Orientation                              | {100} +/- 0.5 degree                                      | Wafer Vendor                |
|               | 23.0        | Nominal Thickness                               | 40.00 +/- 2.00 $\mu$ m                                    | Filmetrics 9 point, 100%    |
|               | 24.0        | Distance to device silicon edge from wafer edge | <= 2.0mm  | Typical by Process          |
|               | 25.0        | Edge Removal Depth in Handle                    | <100 $\mu$ m  | Guaranteed by process       |
|               | 26.0        | Device Doping Type                              | N   | Wafer Vendor                |
|               | 27.0        | Device Dopant                                   | Phosphorus  | Wafer Vendor                |
|               | 28.0        | Device Growth Method                            | CZ or MCZ   | Wafer Vendor                |
|               | 29.0        | Device Resistivity                              | 1 ~ 5 Ohm cm  | Wafer Vendor                |
|               | 30.0        | Voids   | none  | Bright Light, 100% (note 2) |
|               | 31.0        | Scratches                                       | none  | Bright Light, 100% (note 2) |
|               | 32.0        | Haze  | none  | Bright Light, 100% (note 2) |
|               | 33.0        | Laser marking                                   | Device Frondsides, Include: DEV40                         | Guaranteed by process       |

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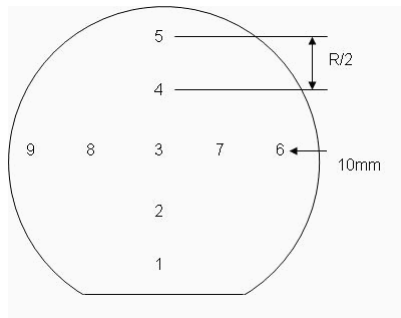
|                  |                   |   |
|------------------|-------------------|---|
| Shipping Details | Wafer per box :   | Max 25  |
|                  | Packaging :       | Taped Polypropylene Wafer Box<br>Empak, Ultrapak, 150.00mm<br>Antistatic Double Bagging |
|                  | Lot Shipment Data | Device Thickness<br>Bow / Warp Data<br>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