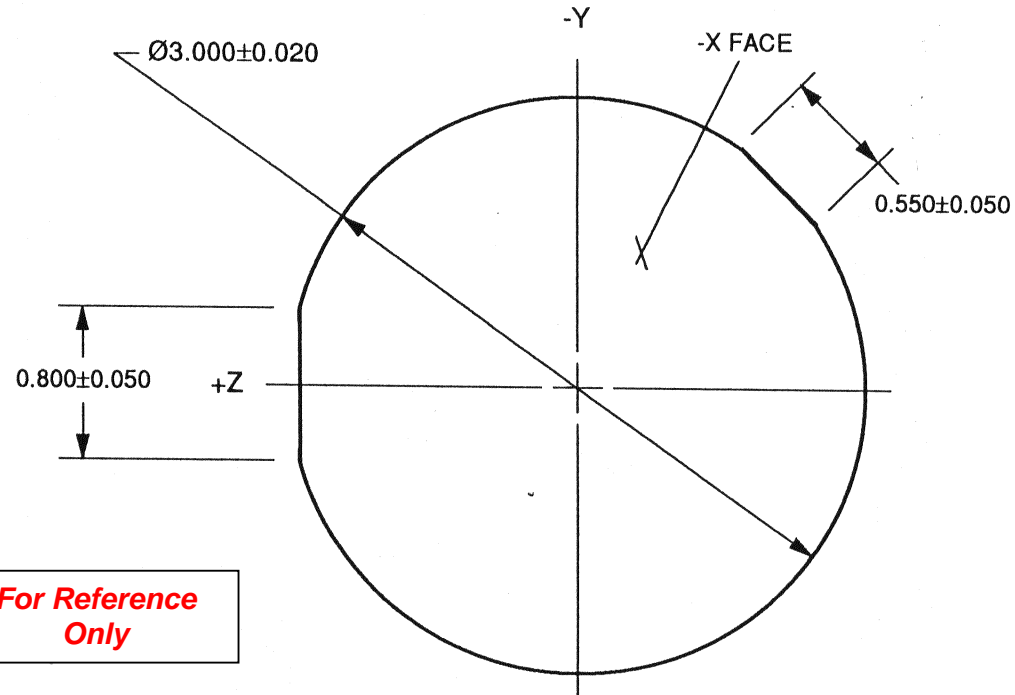


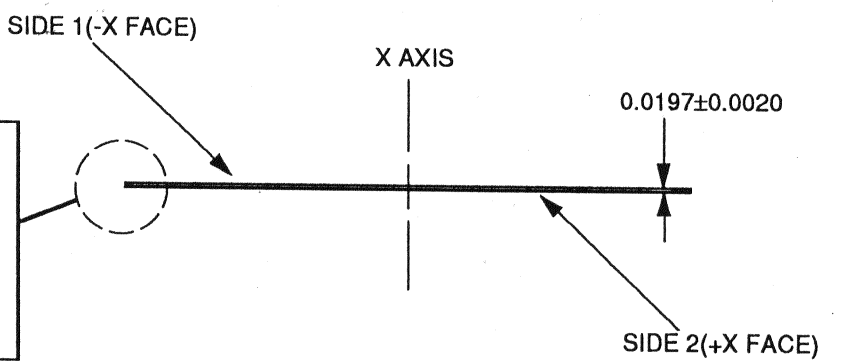
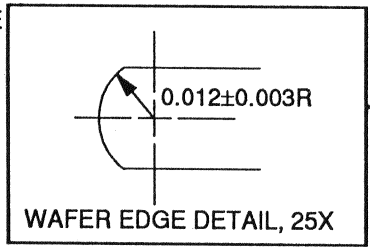
NOTES:

- 1.0 ALL DIMENSIONS ARE IN inches.
- 2.0 ORIENTATIONS
 - 2.1 WAFER SURFACE IS NORMAL TO THE X AXIS $\pm 0.5^\circ$
 - 2.2 WAFER FLAT
 - 2.2.1 PRIMARY FLAT, PERPENDICULAR TO THE +Z AXIS $\pm 0.5^\circ$
 - 2.2.2 SECONDARY FLAT 135° CLOCKWISE FROM THE PRIMARY FLAT WHEN VIEWING THE -X POLISHED FACE.
- 3.0 SURFACES
 - 3.1 SIDE 1
 - 3.1.1 POLISHED, NO PITS OR SCRATCHES ALLOWED WITHIN THE WORKING AREA (ENTIRE WAFER DIAMETER LESS 0.039 AROUND THE EDGE). INSPECTED USING UNAIDED EYE WITH REFLECTED LIGHT.
 - 3.2 SIDE 2
 - 3.2.1 POLISHED, LIGHT PITS OR SCRATCHES ALLOWED WITHIN THE WORKING AREA (ENTIRE WAFER DIAMETER LESS 0.039 AROUND THE EDGE). INSPECTED USING UNAIDED EYE WITH REFLECTED LIGHT.
 - 3.3 EDGE
 - 3.3.1 ALL EDGES ROUNDED WITH A 0.012 ± 0.003 RADIUS.
 - 3.3.2 NO CHIPS GREATER THAN 0.020 IN PENETRATION AND 0.039 IN LENGTH.
 - 3.4 FLATNESS
 - 3.4.1 WARP EQUAL TO OR LESS THAN $50 \mu\text{m}$. MEASURED IN THE FREE STATE.
 - 3.4.2 TOTAL THICKNESS VARIATION (TTV) LESS THAN $10.0 \mu\text{m}$. DEFINED AS THE DIFFERENCE BETWEEN THE LOWEST AND HIGHEST ELEVATION OF THE WAFER, MEASURED IN THE CLAMPED STATE.

Zone	Rev.	Description	Approved	E.O.#	Date
All	0				



For Reference Only



DOCUMENT

APR 12 2001

CONTROL

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Finish:	Material: LITHIUM NIOBATE	<p>Crystal Technology, Inc. A Siemens Company</p>
Unless Otherwise Specified, Dimensions in Inches	Drawn By: SA Checked: [Signature] Approved: [Signature]	
Tolerances Inches Millimeters		TITLE: LN WAFER 3.000"Ø x 0.0197" (X) Polish/Polish 0.800" +Z flat 0.550" secondary
.X ± 1	X ± .5	SIZE: A Dwg. No.: 99-00629-01 Rev.: A
.XX ± .01	.X ± .1	SCALE: 1:1 CAGE Code 60559 Sheet 1 of 1
.XXX ± .005		
Angles ± 1°	Surface Finish: ✓	