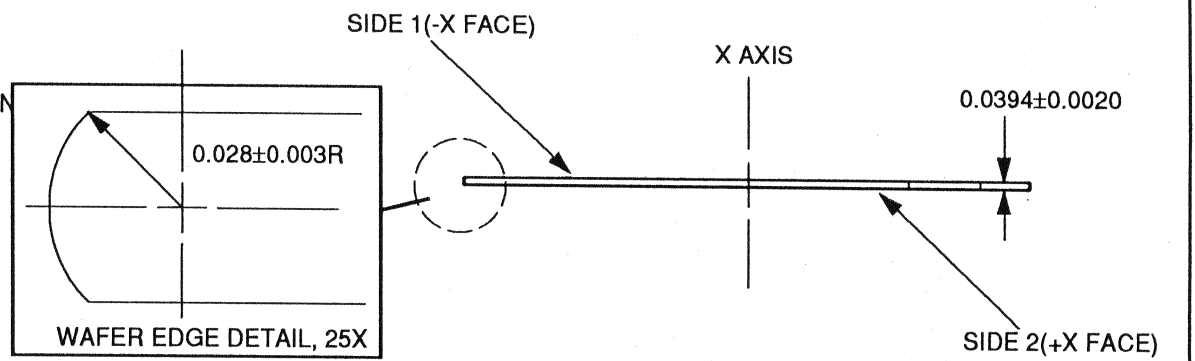
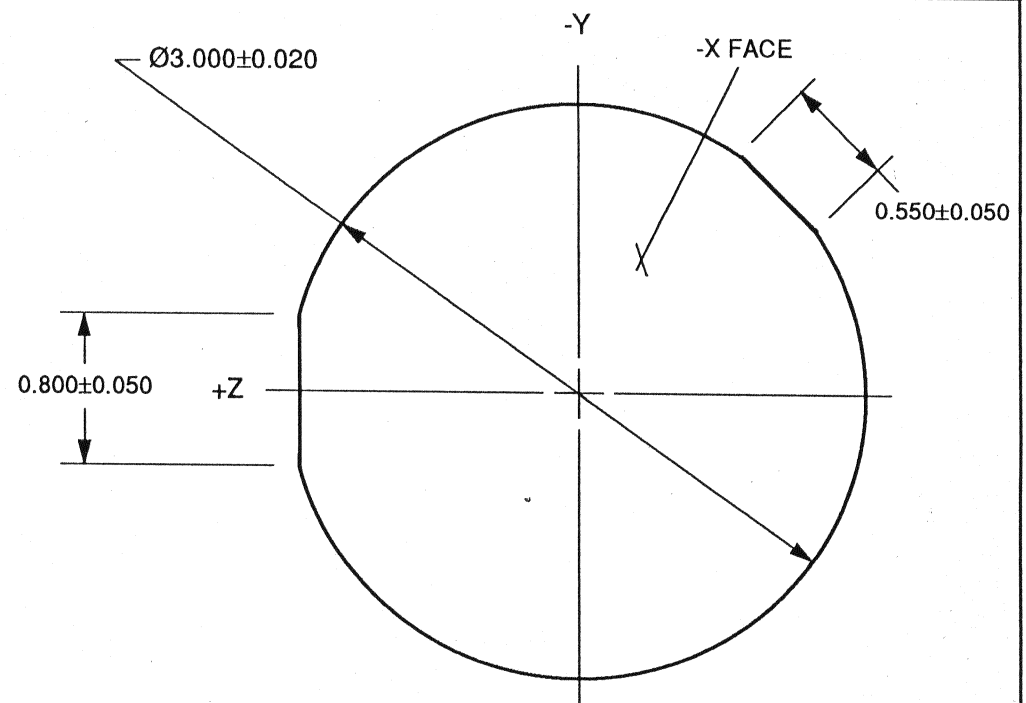


NOTES:

- 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 0.028 ± 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 $50.0 \mu\text{m}$. 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 26 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: <i>SR</i>	10/27/97	
Tolerances		Checked: <i>CB</i>	12/10/97	TITLE: LN WAFER 3.000"Ø x 0.0394" (X) Polish/Polish, 0.800" +Z flat, 0.550" secondary
Inches	Millimeters	Approved:		SIZE: A
X ± 1	X ± 5	Design Activity Approval:		Dwg. No.: 99-00630-01
.XX ± .01	X ± 1	Surface Finish	✓	Rev.: B
.XXX ± .005		Angles ± 1°		SCALE: 1:1
				CAGE Code 50559
				Sheet 1 of 1