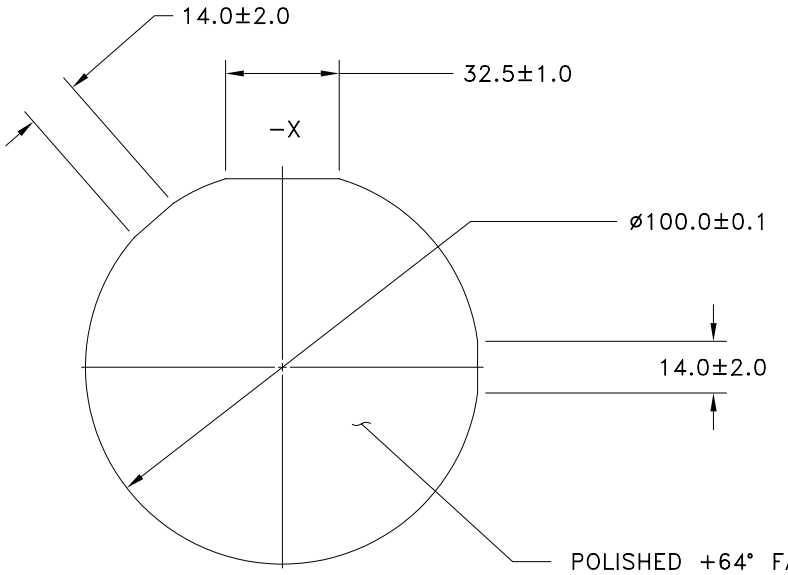
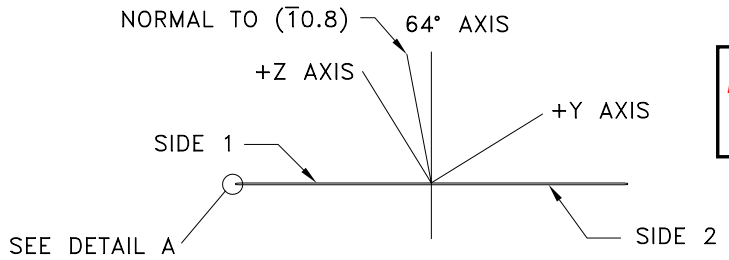
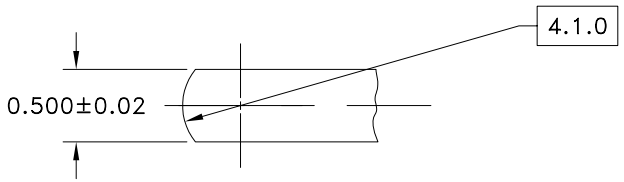
NOTES:
1.0.0 ORIENTATIONS
1.1.0 SURFACE (64°) IS ROTATED FROM ($\bar{1}$0.8) TOWARDS THE +Y=[$\bar{1}$0.0] AXIS BY 4.6°±0.2°. THE ROTATION AXIS IS −X=[1$\bar{2}$.0].
1.2.0 WAFER FLATS.
1.2.1 MAJOR FLAT IS NORMAL TO THE −X AXIS WITHIN ±0.20°.
1.2.2 FIRST MINOR FLAT IS 45°±2.0° COUNTER CLOCKWISE FROM THE MAJOR FLAT WHEN VIEWING THE POLISHED FACE.
1.2.3 SECOND MINOR FLAT IS 90°±2.0° CLOCKWISE FROM THE MAJOR FLAT WHEN VIEWING THE POLISHED FACE.
2.0.0 SURFACES
2.1.0 SIDE 1
2.1.1 POLISHED, NO PITS OR SCRATCHES ALLOWED WITHIN THE WORKING AREA (ENTIRE WAFER DIAMETER LESS 1.0mm AROUND THE EDGE). INSPECTED USING UNAIDED EYE WITH REFLECTED LIGHT.
2.2.0 SIDE 2
2.2.1 GROUND, Ra 0.5um − 0.7um.
3.0.0 FLATNESS
3.1.0 WARP ≤ 40.0um.
3.2.0 TOTAL THICKNESS VARIATION: TTV < 15 MICRONS.
3.3.0 BOW: −20 MICRONS<BOW<+20 MICRONS
3.4.0 FOCAL PLANE DEVIATION: −6 MICRONS<FPD<+6 MICRONS
4.0.0 EDGE
4.1.0 ALL EDGES ROUNDED WITH A R=0.28±0.08mm RADIUS.
4.2.0 NO CHIPS GREATER THAN 0.25mm IN PENETRATION AND 0.25mm IN LENGTH.
5.0.0 MATERIAL
5.1.0 CONGRUENT LITHIUM NIOBATE, Tc=1142.3±1.9°C.

REVISIONS					
ZONE	REV	DESCRIPTION	ECO NO.	APPD.	DATE
ALL	B	Update Logo	13207	Scholz	05/29/03





For Reference Only



DETAIL A
SCALE: N/A

FINISH: SEE NOTES	CONTRACT NUMBER		
MATERIAL: SEE NOTES	DR.	dhj	11/22/00
SPEC. NO.	CHK.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM	APPD.		
TOLERANCES	APPD.		
INCHES / MILLIMETERS	DESIGN ACTIVITY APPROVAL:		
.XX ± .01 / X.XX ± 0.25	CUSTOMER APPROVAL:		
.XXX ± .005 / X.XXX ± 0.125			
.XXXX ± .0020 / SURFACE FINISH 63	DO NOT SCALE DRAWING		
ANG ± .5°			

Crystal Technology, Inc.
An EPCOS Company

TITLE: LN WAFER, 100.0øX0.50mm, 64°RY, POL/GRD 6um FPD

SIZE	DWG. NO.	REV.
A	97−02529−01	B
SCALE: N/A	SH. 1 OF 1	

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