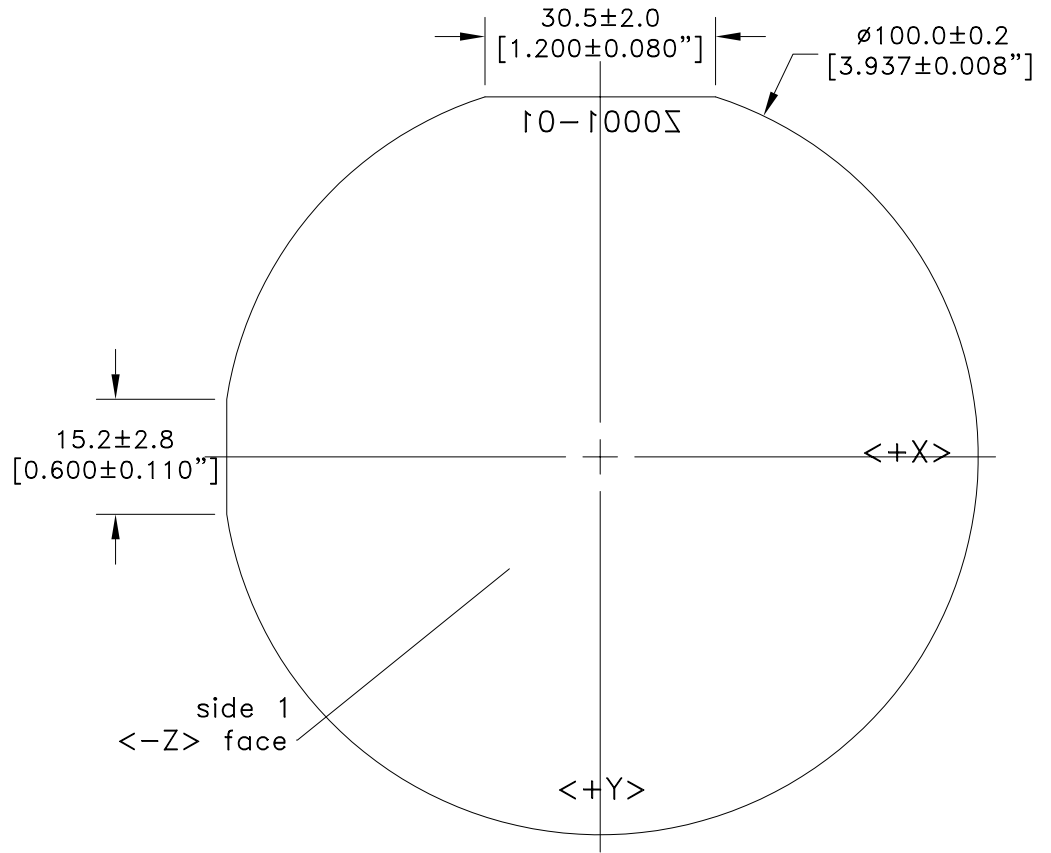
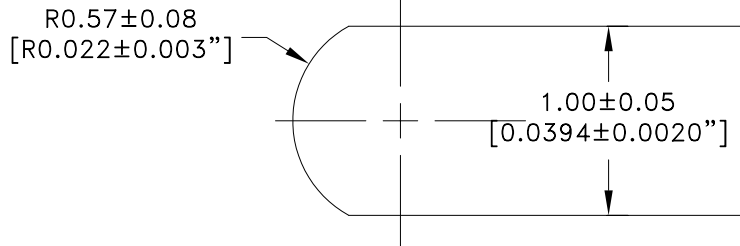


Notes:

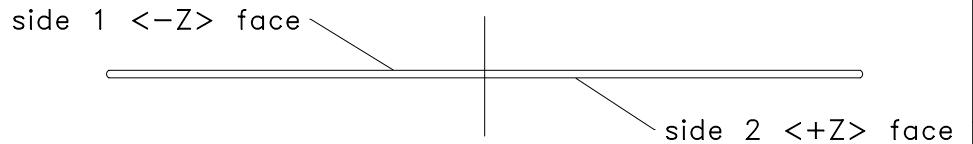
- 1.0 Material
Lithium Niobate optical grade
- 2.0 Orientations
 - 2.1 Wafer surface is normal to $\langle Z \rangle \pm 0.2^\circ$
 - 2.2 Flats
 - 2.2.1 Primary flat is normal to $\langle -Y \rangle \pm 0.25^\circ$.
 - 2.2.2 Secondary flat is $90^\circ \pm 1^\circ$ counter clockwise from primary flat when viewing the $-Z$ face.
- 3.0 Edge
 - 3.1 All edges rounded with $R0.57 \pm 0.08\text{mm}$.
 - 3.2 No more than 2 edge chips greater than 0.5mm in penetration and 1.0mm in length.
- 4.0 Surfaces
 - 4.1 Side 1 $\langle -Z \rangle$ face
Polished 10-5 scratch-dig with 1mm edge exclusion. No pits or scratches visible with reflected light and unaided eye.
 - 4.2 Side 2 $\langle +Z \rangle$ face
Polished 20-10 scratch-dig with 1mm edge exclusion. Light pits and scratches visible with reflected light and unaided eye allowed.
- 5.0 Flatness
 - 5.1 Warp $< 20\mu\text{m}$
 - 5.2 TTV $< 10\mu\text{m}$
- 6.0 Laser Marking
 - 6.1 Center text under the primary flat on the $+Z$ side.
Begin with Z followed by a 4-digit boule serial number separated by a dash from a 2-digit wafer sequence number (Z0001-01).
 - 6.2 FONT: SEM 15x23
HEIGHT=3.0mm, WIDTH=1.5mm, SEPARATION=2.2mm
DISTANCE FROM FLAT=1mm from top of text.
- 7.0 Certificate of Conformance
Supply certificate of conformance sheet 97-01514-10-100.




For Reference Only



Wafer Edge Detail, 25X



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Material: Lithium Niobate	DR. Igordon	04-28-03	 Crystal Technology, Inc. An EPCOS Company
Unless otherwise specified, dimensions in mm	CHK.		
Tolerances			APPD.
Inches	Millimeters	Wafer Code:	Title:
.X ± 0.1 .XX ± 0.01 .XXX ± 0.005 .XXXX ± 0.0020	X ± 0.5 .X ± 0.25 .XX ± 0.1 .XXX ± 0.05	LNA--Z:100.100DN	LNIO 100ø x 1.0mm, -Z Po/Po -Y FLT, TTV<10µm, lasermark
Angles ± 0.5°		Customer Approval:	Size: A
DO NOT SCALE DRAWING		Scale: 1:1	Dwg. No: 97-01514-10
		Sheet 1 of 1	Rev: A