

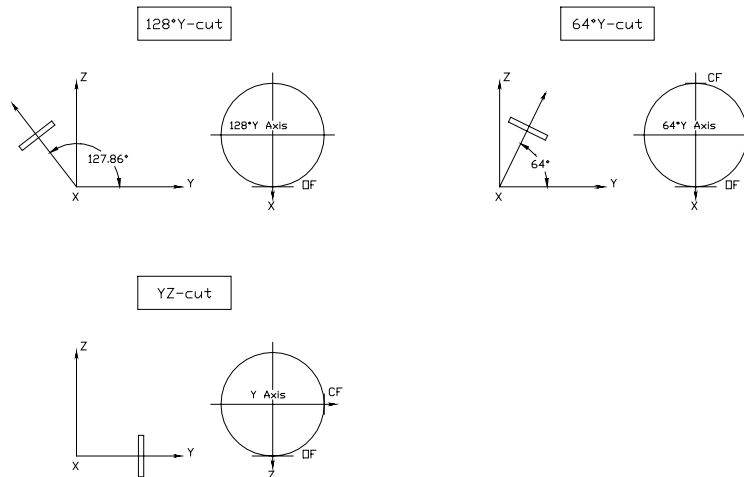
## Wafers for Surface Acoustic Wave Devices LiNbO<sub>3</sub> (LN) Wafers

### 3" LiNbO<sub>3</sub> (LN) Wafers

Characteristics	Unit	128° Y-cut	YZ-cut	64° Y Cut
Orientation *	°	127.86° Y ± 0.5°	YZ ± 0.5°	64° ± 0.5°
Diameter *	mm	∅ 76.2 ± 0.5	∅ 76.2 ± 0.5	∅ 76.2 ± 0.5
Reference Flat (OF)	mm	22 ± 2 X ± 0.5°	22 ± 2 Z ± 0.5°	22 ± 2 X ± 0.5°
Reference Flat (CF)	mm	None	10 ± 3 90° counter-clockwise to OF	10 ± 3 180° clockwise to OF ± 1.0°
Thickness	mm	0.50 ± 0.03 0.35 ± 0.03	0.50 ± 0.03 0.35 ± 0.03	0.50 ± 0.03 0.35 ± 0.03
Surface Polish	-	Mirror Polished	Mirror Polished	Mirror Polished
Back Ground	-	GC#1000 Lapped & Etched	GC#1000 Lapped & Etched	GC#1000 Lapped & Etched
Bowing	μm	10 max		
Taper	μm	0.02 max		
TTV	μm	10 max		
Edge Bevel	-	Edge Rounding		
Curie Temperature	°C	1142 ± 3		

\* Other requirement available upon request.

### Orientation and Shape of LN Wafers



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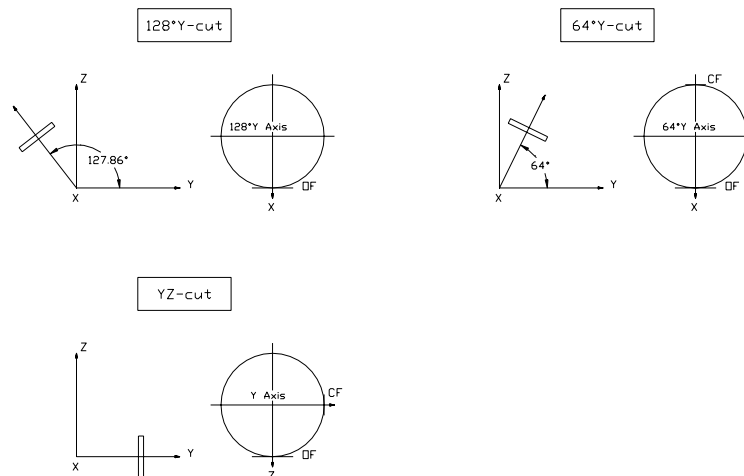
# LiNbO<sub>3</sub> (LN) Wafers

## 4" LiNbO<sub>3</sub> (LN) Wafers

Characteristics	Unit	128° Y-cut	YZ-cut	64° Y Cut
Orientation *	°	127.86° Y ± 0.5°	YZ ± 0.5°	64° ± 0.5°
Diameter *	mm	∅ 100.0 ± 0.7	∅ 100.0 ± 0.7	∅ 100.0 ± 0.7
Reference Flat (OF)	mm	32 ± 2 X ± 0.5°	32 ± 2 Z ± 0.5°	32 ± 2 X ± 0.5°
Reference Flat (CF)	mm	None	12 ± 3 90° counter-clockwise to OF	12 ± 3 180° clockwise to OF ± 1.0°
Thickness	mm	0.50 ± 0.05 0.35 ± 0.05	0.50 ± 0.05 0.35 ± 0.05	0.50 ± 0.05 0.35 ± 0.05
Surface Polish	-	Mirror Polished	Mirror Polished	Mirror Polished
Back Ground	-	GC#1000 Lapped & Etched	GC#1000 Lapped & Etched	GC#1000 Lapped & Etched
Bowing	μm	20 max		
Taper	μm	0.02 max		
TTV	μm	18 max		
Edge Bevel	-	Edge Rounding		
Curie Temperature	°C	1142 ± 3		

\* Other requirement available upon request.

## Orientation and Shape of LN Wafers



## Ordering Information

Type	Orientation	Diameter	Thickness	Bowing	Taper	Options
Substrates	Cut Type and Orientation	Wafer diameter requirement	Wafer thickness requirement	Wafer bowing requirement	Wafer taper requirement	Other options available upon request
- LT - LN - Quartz	- Y Cut - X Cut - Y-Z Cut					

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