



Lithium Niobate Wafers

Product Description:

Lithium Niobate, a well-developed optical material, has been widely used for surfaced acoustic devices, integrated optic devices, and new wavelength generation and refractive elements. The wide applications are due to its fundamental properties including high electro-optic and nonlinear optic coefficients, a wide transparency range, high electro-mechanical coupling coefficients, and excellent chemical and mechanical stability. Precision Micro-optics offers black lithium niobate wafers.

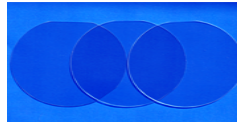


Figure 1: Lithium Niobate Wafers

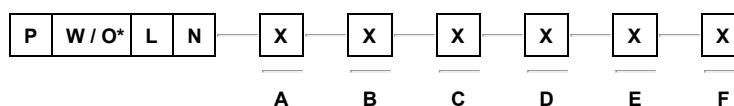
Specification:

Orientation	X-Axis, Y-Axis, Z-Axis, Y-Axis 128°/64°/41°/36° Rotated
Orientation Tolerance	±0.2°
Diameter	50.8±0.1mm (2 inches), 76.2±0.2mm (3 inches), 100±0.3mm (4 inches), 150±0.5mm (6 inches)
Thickness	500±25μm, 660±25μm, 710±25μm, 790±25μm, 1000±25μm
Primary Flat Length	16.0±1.5mm, 22.0±2.0mm, 32.5±2.5mm
TTV	≤30μm
BOW	≤30μm
Front Surface	Ra < 1nm
Back Surface	Fine ground or polished (Ra<1nm)

Applications:

- Electro-optical modulators
- Quasi-phase matched frequency generation
- Wavefront distortion
- Integrated Optical devices
- Acoustic Transducers
- Acousto-optical filters

Ordering Information:



*: W for SAW Grade and O for Optical Grade

A	Orientation	1 = X-Axis
		2 = Y-Axis
		3 = Z-Axis
		4 = Y-Axis 128° Rotated
		5 = Y-Axis 64° Rotated
		6 = Y-Axis 41° Rotated
		7 = Y-Axis 36° Rotated
		0 = Customized Orientation
B	Diameter	1 = 2 Inch
		2 = 3 Inch
		3 = 4 Inch
		4 = 5 Inch
		5 = 6 Inch
		6 = 1 Inch
		0 = Customized Diameter
C	Thickness	1 = 500µm
		2 = 660µm
		3 = 710µm
		4 = 790µm
		5 = 1000µm
		6 = 250µm
		7 = 100µm
		0 = Customized Thickness
D	Primary Flat Orientation	1 = Normal to Z-axis
		2 = Normal to X-axis
		3 = Normal to Y-axis
		0 = Customized Flat Orientation
E	Primary Flat Length	1 = 16mm
		2 = 22mm
		3 = 32.5mm
		4 = 47.5mm
		5 = 8.0mm
		0 = Customized Flat Length
F	Single or Double Side Polished	1 = Single Side Polished
		2 = Double Side Polished