

Black Lithium Niobate Wafer

(LiNbO3 SAW Grade)

The reduction technology is used to produce Black Lithium Niobate (LiNbO₃) which has high ability to neutralize electrical charges even if the electrical potential occurs instantaneously. Black Lithium Niobate shows no difference in piezoelectric properties from standard wafers. As a result, black reduced lithium niobate wafers are widely adopted to produce higher frequency SAW devices.

Product Parameters

Material	Black Lithium Niobate Wafer	
Curie Temp	1142±2.0°C	
Cutting Angle	X/Y/Z/Y36/Y41/Y64/Y128/etc	
Diameter/size	3"/4"/6" & 8" wafer	
Tol(±)	<0.20 mm	
Thickness	0.18 ~ 0.5mm or customer specific	
Primary Flat	22mm /32mm /42.5mm /57.5mm /semi notch	
LTV (5mmx5mm)	<1µm	
TTV	<3µm	
Bow	-30<bow<30	
Warp	<40µm	
PLTV(<0.5um)	≥95%(5mm*5mm)	
Surface Type	Single Side Polished /Double Side Polished	
Polished side Ra	<0.5nm	
Back Side Criteria	General is 0.2-0.5µm or as customized	
Edge Criteria	R=0.2mm or Bullnose	
Wafer Surface Criteria	Transmissivity	general:5.9x10 ⁻¹¹ <s<2.0*10 ⁻¹⁰ at 25°C
	Contamination,	None
	Particles ϕ >0.3 µ m	<= 30
	Scratch , Chipping	None
	Defect	No edge cracks, scratches, saw marks, stains

Please contact us for customer specific requirements and questions