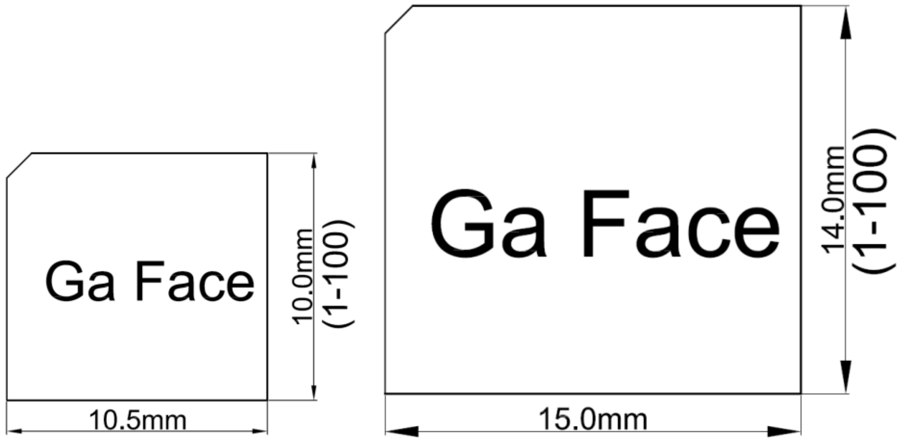
氮化镓晶片
Free-standing GaN Substrates (Customized size)
生长方法: HVPE,氢化物气相外延,

性能参数 Specifications:

产品型号 Item	**GaN-FS-10**	**GaN-FS-15**
尺寸 Dimensions	10.0mm×10.5mm	14.0mm×15.0mm
孔洞密度 Marco Defect Density	*A Level*	0 cm^{-2}
	B Level	≤ 2 cm^{-2}
厚度 Thickness	Rank 300	300 ± 25 μm
	Rank 350	350 ± 25 μm
	Rank 400	400 ± 25 μm
晶体取向 Orientation	C-axis(0001) ± 0.5°	
TTV(Total Thickness Variation)	≤15 μm	
弯曲度 BOW	≤20 μm	
导电类型 Conduction Type	N-type	Semi-Insulating
电阻率 Resistivity(300K)	< 0.5 Ω·cm	>10^6 Ω·cm
位错密度 Dislocation Density	Less than 5x10^6 cm^{-2}	
有效面积 Useable Surface Area	> 90%	
抛光 Polishing	Front Surface: Ra < 0.2nm. Epi-ready polished Back Surface: Fine ground	
包装 Package	Packaged in a class 100 clean room environment, in single wafer containers, under a nitrogen atmosphere.	



性能参数 Specifications:

产品型号 Item	**GaN-FS-N-1.5**		
尺寸 Dimensions	Φ 25.4mm ± 0.5mm	Φ 38.1mm ± 0.5mm	Φ 45.0mm ± 0.5mm
孔洞密度 Marco Defect Density	LD Level	> 90%	
	LED Level	> 78%	
厚度 Thickness	300 ± 25 µm		
晶体取向 Orientation	C-axis(0001) ± 0.5°		
主定位边 Orientation Flat	(1-100) ± 0.5°, 12 ± 1mm		
次定位边 Secondary Orientation Flat	(11-20) ± 3°, 6 ± 1mm		
TTV(Total Thickness Variation)	⩽15 µm		
弯曲度 BOW	⩽20 µm		
导电类型 Conduction Type	N-type	Semi-Insulating	
电阻率 Resistivity(300K)	< 0.5 Ω·cm	$>10^6$ Ω·cm	
位错密度 Dislocation Density	Less than $5\text{x}10^6$ cm^{-2}		
有效面积 Useable Surface Area	> 90%		
抛光 Polishing	Front Surface: Ra < 0.2nm. Epi-ready polished Back Surface: Fine ground		
包装 Package	Packaged in a class 100 clean room environment, in single wafer containers, under a nitrogen atmosphere.		