

Other Specification

Flatness

Product	Size	Surface Finish	TTV(μm)		TIR(μm)		LTV(μm)			Warp(μm)		
			Guaranteed	(Ref.) Typical	Guaranteed	(Ref.) Typical	Guaranteed	PLTV(%) Guaranteed	(Ref.) Typical	Guaranteed	(Ref.) Typical	
GaAs	Semi-Insulating	6"φ	P/P	≤ 5	1.5	≤ 4	1.8	$\leq 1.5(20\text{mm})$	≥ 90	0.7	≤ 10	3
	Laser Diodes	3"φ	P/LE	≤ 10	6	—	—	—	—	—	≤ 10	7
		4"φ		≤ 10	6	—	—	—	—	—	≤ 10	7
InP	2"φ	P/E	≤ 15	10	≤ 12	10	—	—	—	≤ 15	10	
		P/LE	≤ 6	4	≤ 6	4	—	—	—	≤ 9	5	
		P/P	≤ 6	4	≤ 6	4	—	—	—	≤ 9	5	
	3"φ	P/LE	≤ 8	4	≤ 6	5	—	—	—	≤ 10	7	
		P/P	≤ 6	3	≤ 4	3	—	—	—	≤ 10	5	
	4"φ	P/P	≤ 5	3	≤ 5	3	—	—	—	≤ 10	5	
	6"φ	P/P	≤ 10	5	≤ 10	4	—	—	—	≤ 10	5	

Definitions of Flatness

TTV	Total Thickness Variation: The difference between the highest and the lowest elevation of the top surface of a clamped wafer. The back surface referenced.	
TIR	Total Indicated Reading : The difference between the highest point above and the lowest point below the front surface referenced focal plane of a clamped wafer. 3 points on the front surface generally used.	
LTV	Local Thickness Variation: The difference between the highest point and the lowest point within a site of the top surface of a clamped wafer. The back surface referenced.	
PLTV	Percent LTV : Percentage of sites on a wafer within the specified LTV value.	
Warp	The difference between the highest point above and the lowest point below the front surface referenced focal plane of an unclamped wafer. A least square fit on the front surface generally used.	

Light Point Defects

Product	Size	Defect Size	Pcs./Wafer	
			Guaranteed	(Ref.) Typical
GaAs VB (Semi-Insulating)	6"φ	$\geq 0.4\mu\text{m}$	≤ 100	30
InP	2"φ	$\geq 1.2\mu\text{m}^2$	≤ 20	7
	3"φ		≤ 30	10
	4"φ		≤ 30	10
	6"φ		≤ 100	50