

76.2 mm SC LEC GaAs Te doped



Parameter		Unit	Values
Diameter		mm	76.2 ± 0.1
Crystal growth method			LEC
Dopant			Te
Conductivity type			n
Carrier concentration ^{*1}		cm ⁻³	(0.2 ... 3.0) E 18
Hall mobility ^{*2}		cm ² / Vs	≥ 2 300
Etch pit density ^{*3}	avg. value on wafer	cm ⁻²	≤ 70 000
(100)-orientation	on	°	± 0.5
	off towards (110) ^{*4}	°	2.0 ± 0.5
Orientation (OF) flat	length	mm	22.0 ± 2.0
SEMI-US	orientation		[01 $\bar{1}$] ± 1°
SEMI-EJ	orientation		[0 $\bar{1}1$] ± 1°
Identification (IF) flat	length	mm	11.0 ± 2.0
SEMI-US	orientation		[011] ± 2°
SEMI-EJ	orientation		[0 $\bar{1}1$] ± 2°
Thickness ^{*4}		µm	450 ± 25
Total thickness variation (TTV)		µm	≤ 10
Total indicated reading (TIR)		µm	≤ 7
Warp		µm	≤ 15
Particles	diameter > 0.3 µm	pcs.	≤ 40
Front side treatment			polished
Back side treatment	standard		cut/ etched
Laser marking			acc. SEMI T 5
Packaging	standard option		cassette single wafer container ^{*5}

^{*1} other ranges upon request

^{*2} depending on doping level or carrier concentration

^{*3} measured according to DIN 50454-1: measurement at 9 sites

^{*4} other values upon request

^{*5} other values upon request for small quantity