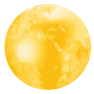

100 mm SC LEC GaAs Te doped

Parameter		Unit	Values
Diameter		mm	100.0 ± 0.1
Crystal growth method			LEC
Dopant			Te
Conductivity type			n
Carrier concentration *1		cm^{-3}	$(0.05 ... 2.5) \times 10^{18}$
Hall mobility *2		cm^2/Vs	$(4.5 ... 2.3) \times 10^3$
Etch pit density *3	avg. value on wafer	cm^{-2}	≤ 100 000
(100)-orientation	on	°	± 0.5
	off towards (110) *4	°	2.0 ± 0.5
Orientation (OF) flat	length	mm	32.5 ± 2.0
SEMI-US	orientation		$[01\bar{1}]$ ± 1°
SEMI-EJ	orientation		$[0\bar{1}\bar{1}]$ ± 1°
Identification (IF) flat	length	mm	18.0 ± 2.0
SEMI-US	orientation		[011] ± 5°
SEMI-EJ	orientation		$[0\bar{1}1]$ ± 5°
Thickness *4		µm	625 ± 25
Total thickness variation (TTV)		µm	≤ 15
Total indicated reading (TIR)		µm	≤ 10
Warp		µm	≤ 10
Particles	diameter > 0.3 µm	pcs.	≤ 80
Front side treatment			polished
Back side treatment	standard		cut/etched
	option		polished
Laser marking			acc. SEMI T 5
Packaging	standard		cassette
	option		single wafer container

*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