150 mm SI VGF GaAs

Parameter		Unit	Values
Diameter Crystal growth method		mm	150.0 ± 0.1 VGF
Resistivity [*1] Hall mobility Carbon content		Ω cm cm^2 / Vs cm^{-3}	(1.0 ... 8.0) E 8 ≥ 4 500 (2.0 ... 12.0) E 15
Etch pit density [*2] EL2 concentration	avg. value on wafer avg. value on wafer	cm^{-2} cm^{-3}	≤ 10 000 (1.0 ... 1.5) E 16
(100)-orientation	on off towards (110) [*3]	° °	± 0.5 2.0 ± 0.5
Notch	orientation angle depth	 ° mm	[010] ± 2° 90 + 5/-1 1.00 + 0.25/-0.00
Thickness [*3] Total thickness variation (TTV) Total indicated reading (TIR) Warp		µm µm µm µm	675 ± 25 ≤ 5 ≤ 4 ≤ 10
Measurement site size Particles	 diameter > 0.3 µm	mm pcs.	20 x 20 ≤ 100
Front side treatment Back side treatment			polished polished
Laser marking			acc. SEMI M 12
Packaging			cassette

[*1] measured @ 22 °C
[*2] measured according to DIN 50454-1: whole wafer mapping, site size 500 x 500 $µm^2$ number of sites 64525, edge exclusion 3 mm
[*3] other values upon request