150 mm SI LEC GaAs

Parameter		Unit	Values
Diameter Crystal growth method		mm	150.0 ± 0.1 LEC
Option A Resistivity [*1] Hall mobility Carbon content		 Ω cm cm^2 / Vs cm^{-3}	 (1.0 ... 6.0) E 7 ≥ 7 000 (0.3 ... 4.0) E 15
Option B Resistivity [*1] Hall mobility Carbon content		 Ω cm cm^2 / Vs cm^{-3}	 (0.6 ... 4.0) E 8 ≥ 4 500 (2.0 ... 10.0) E 15
Etch pit density [*2] EL2 concentration	avg. value on wafer avg. value on wafer	cm^{-2} cm^{-3}	≤ 100 000 (1.2 ... 1.7) 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: measurement at 9 sites
[*3] other values upon request