

GaAs/GaAs Epitaxial Wafer for IR LED

IR Standard Epi-wafer

STRUCTURE & MATERIAL SPECIFICATION	MODEL NUMBER		LG096LE-04			LG096LE-04B			LG396LE-04			LG396LE-04B		
	ITEM	UNIT	2nd layer	1st layer	substrate	2nd layer	1st layer	substrate	2nd layer	1st layer	substrate	2nd layer	1st layer	substrate
Material			GaAs	GaAs	GaAs	GaAs	GaAs	GaAs	GaAs	GaAs	GaAs	GaAs	GaAs	GaAs
Growth Method			Liquid Phase Epitaxy		HB/VGF	Liquid Phase Epitaxy		HB/VGF	Liquid Phase Epitaxy		HB/VGF	Liquid Phase Epitaxy		HB/VGF
Conduction Type			P	N	N	P	N	N	P	N	N	P	N	N
Dopant			Si	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
Carrier Conc.	cm ⁻³		1.0x10 ¹⁸ Min.	1.0x10 ¹⁷ Min.	1~20x10 ¹⁷	1.0x10 ¹⁸ Min.	1.0x10 ¹⁷ Min.	1~20x10 ¹⁷	1.0x10 ¹⁸ Min.	1.0x10 ¹⁷ Min.	1~20x10 ¹⁷	1.0x10 ¹⁸ Min.	1.0x10 ¹⁷ Min.	1~20x10 ¹⁷
Thickness	um		25~65	25~65	115~245	25~65	25~65	75~205	25~65	25~65	115~245	25~65	25~65	75~205
E.P.D	cm ⁻²				1x10 ⁴ Max.			1x10 ⁴ Max.			1x10 ⁴ Max.			1x10 ⁴ Max.
Orientation					(100)±0.5deg.			(100)±0.5deg.			(100)±0.5deg.			(100)±0.5deg.
CHARACTERISTICS	E.L. Wavelength (at IF=20mA)	nm	940±10			940±10			940±10			940±10		
	Output Power (at IF=20mA)	mV	7.5 Min. (PROWTech Unit)			7.5 Min. (PROWTech Unit)			7.5 Min. (PROWTech Unit)			7.5 Min. (PROWTech Unit)		
	Surface/Backside Appearance		As Grown/Lapping			As Grown/Lapping			As Grown/Lapping			As Grown/Lapping		
	Total Thickness	um	270±25			230±25			270±25			230±25		
	Diameter	mm	62mm Max			62mm Max			77mm Max			77mm Max		

Notes

1. These models are suitable for mass production of photo coupler and photo interrupter application with highly uniform characteristics and stable reproducibility.
2. These specifications are subject to change without notice.