

AlGaAs/AlGaAs Epitaxial Wafer for IR LED

MODEL NUMBER		LGP8302-25-DDH				LGP8502-25-DDH				LGP8602-25-DDH				LGP8800-25-DDH				LGP9000-25-DDH								
STRUCTURE & MATERIAL SPECIFICATION	ITEM	UNIT	3rd layer	2nd layer	1st layer	substrate (removed)	3rd layer	2nd layer	1st layer	substrate (removed)	3rd layer	2nd layer	1st layer	substrate (removed)	3rd layer	2nd layer	1st layer	substrate (removed)	3rd layer	2nd layer	1st layer	substrate (removed)				
	Material		AlGaAs	AlGaAs	AlGaAs	GaAs	AlGaAs	AlGaAs	AlGaAs	GaAs	AlGaAs	AlGaAs	AlGaAs	GaAs	AlGaAs	GaAs	AlGaAs	GaAs	AlGaAs	GaAs	AlGaAs	GaAs	AlGaAs	GaAs		
	Growth Method		Liquid Phase Epitaxy			HB/VGF	Liquid Phase Epitaxy			HB/VGF	Liquid Phase Epitaxy			HB/VGF	Liquid Phase Epitaxy			HB/VGF	Liquid Phase Epitaxy			HB/VGF				
	Conduction Type		P	P	N	N	P	P	N	N	P	P	N	N	P	P	N	N	P	P	N	N	P	P	N	N
	Carrier Conc.	cm ⁻³	1.0x10 ¹⁸ Min.		2.0x10 ¹⁷ Min.	2~20x10 ¹⁷	1.0x10 ¹⁸ Min.		2.0x10 ¹⁷ Min.	2~20x10 ¹⁷	1.0x10 ¹⁸ Min.		2.0x10 ¹⁷ Min.	2~20x10 ¹⁷	1.0x10 ¹⁸ Min.		2.0x10 ¹⁷ Min.	2~20x10 ¹⁷	1.0x10 ¹⁸ Min.		2.0x10 ¹⁷ Min.	2~20x10 ¹⁷	1.0x10 ¹⁸ Min.		2.0x10 ¹⁷ Min.	2~20x10 ¹⁷
	Thickness	um	10~40	1.0 Typ.	110~220		10~40	1.0 Typ.	110~220		10~40	1.0 Typ.	110~220		10~40	1.0 Typ.	110~220		10~40	1.0 Typ.	110~220		10~40	1.0 Typ.	110~220	
	E.P.D	cm ⁻²				1x10 ⁴ Max.				1x10 ⁴ Max.				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.				(100)±0.5deg.				(100)±0.5deg.
CHARACTERISTICS	E.L. Wavelength (at IF=20mA)	nm	830±10				850±10				860±10				880±10				900±10							
	Output Power (at IF=20mA)	mV	5.0 Min. (PROWTech Unit)				5.0 Min. (PROWTech Unit)				5.0 Min. (PROWTech Unit)				5.0 Min. (PROWTech Unit)				5.0 Min. (PROWTech Unit)							
	Surface/Backside Appearance		As Grown/Etching				As Grown/Etching				As Grown/Etching				As Grown/Etching				As Grown/Etching							
	Total Thickness	um	120~220				120~220				120~220				120~220				120~220							
	Diameter	mm	61 Max				61 Max				61 Max				61 Max				61 Max							

Notes

1. These models are suitable for use as the light source in a wide range of optical control.
2. These specifications are subject to change without notice.