

## AlGaAs/AlGaAs Epitaxial Wafer for IR LED

MODEL NUMBER		LGP8302-25-DDH				LGP8502-25-DDH				LGP8602-25-DDH				LGP8900-25-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)
	Material		AlGaAs	AlGaAs	AlGaAs	GaAs	AlGaAs	AlGaAs	AlGaAs	GaAs	AlGaAs	AlGaAs	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
	Conduction Type		P	P	N	N	P	P	N	N	P	P	N	N	P	P	N	N
	Carrier Conc.	cm <sup>-3</sup>	1.0x10 <sup>18</sup> Min.		2.0x10 <sup>17</sup> Min.	2~20x10 <sup>17</sup>	1.0x10 <sup>18</sup> Min.		2.0x10 <sup>17</sup> Min.	2~20x10 <sup>17</sup>	1.0x10 <sup>18</sup> Min.		2.0x10 <sup>17</sup> Min.	2~20x10 <sup>17</sup>	1.0x10 <sup>18</sup> Min.		2.0x10 <sup>17</sup> Min.	2~20x10 <sup>17</sup>
	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	
	E.P.D	cm <sup>-2</sup>				1x10 <sup>4</sup> Max.				1x10 <sup>4</sup> Max.				1x10 <sup>4</sup> Max.				1x10 <sup>4</sup> Max.
	Orientation					(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				890±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)			
	Surface/Backside Appearance		As Grown/Etching				As Grown/Etching				As Grown/Etching				As Grown/Etching			
	Total Thickness	um	120~220				120~220				120~220				120~220			
	Diameter	mm	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.