

650 nm LD Epiwafer

(LD) AND LIGHT-EMITTING DIODE (LED)

EPHAWERS FOR VERTICAL CAVITY SURFACE EMITTING LASER DIODE (VCSEL)

SOLAR CELL EPIWAFERS

Descriptions

The 650nm LD epiwafer is comprised with InGaP/InAlGaP material multiple quantum-Well as the active layer. Both pointer and DVD laser epiwafers are available.

Wafer Characterization

The epiwafers are characterized by PL, DCXD and CV tests. **Figure 1** through **Figure 3** show the typical results of our epiwafer. The PL wavelength mapping for 1200 points in the inner 40 mm of a 2" wafer shows stand deviation of 0.6nm.

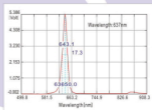


FIG. 1

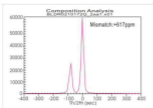


FIG. 2

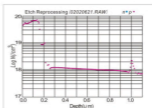


FIG. 3

Device Performance

Characteristics	Symbol	Conditions	Typ.
Threshold Current	I_{th}		~20 mA
Operating Current	I_{op}	@ 5 mW	~32 mA
Wavelength	λ		650~655 nm
Slope efficiency	η	@ 5 mW	~0.4 W/A

* Device structure: 4 μ m x 250 μ m Ridge Laser; as cleaved, @ R. T.