

# GREEN LASER DIODE

## SDL-520-1000-911E



**SEMICOM**  
VISUAL

### Features

**Wavelength: 520nm (Typ.)**  
**Optical power: Po = 1000mW (Typ.)**  
**Package: Φ9mm (RoHS compliant)**

### Applications

**Industrial Applications**

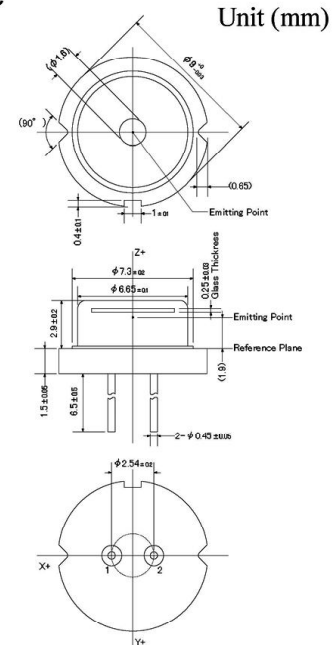
### Absolute Maximum Ratings

(T<sub>c</sub>=25°C)

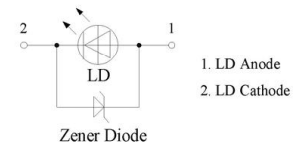
Parameter	Symbol	Rating	Unit
Optical Output	P <sub>o</sub>	<b>1000</b>	mW
Reverse Voltage	V <sub>r</sub>	<b>5</b>	V
Operating Temperature	T <sub>op</sub>	0~+50	°C
Storage Temperature	T <sub>stg</sub>	-40~+85	°C

\* Case Temperature

### Package



### Pin Connection



**This model does not have Photo Diode.**  
**This model has a Zener Diode built in**  
**as a protection circuit against static**  
**electricity.**

### Electrical and Optical Characteristics

(T<sub>c</sub>=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I <sub>th</sub>	-	-	<b>300</b>	-	mA	
Operating Current	I <sub>op</sub>	-	-	-	<b>1800</b>	mA	
Operating Voltage	V <sub>op</sub>	-	-	<b>4.6</b>	-	Volt	
Slope Efficiency	η	If=1.5A	-	<b>0.83</b>	-	mW/mA	
LD Reverse Voltage		-	-	-	-	V	
Beam Divergence (FWHM)	Parallel	θ <sub>  </sub>	If=1.5A	<b>5</b>	<b>11</b>	<b>25</b>	deg.
	Perpendicular	θ <sub>⊥</sub>	If=1.5A	<b>35</b>	<b>46</b>	<b>55</b>	deg.
Lasing Wavelength	λ		<b>510</b>	<b>520</b>	<b>525</b>	nm	
Beam Diameter (Perpendicular)	Δθ <sub>⊥</sub>		<b>-5</b>	-	<b>+5</b>	deg.	
Monitor Current	I <sub>m</sub>		-	-	-	mA	

\* Angle at 50% peak intensity (full-width at half-maximum)

Note: The above specification is subject to change without notice