

# SKY BLUE LASER DIODE

## SDL-488-60-501G



**SEMICOM**  
VISUAL

### Features

- Wavelength: 488nm (Typ.)
- Optical power:  $P_o = 60\text{mW}$  (Typ.)
- Package: TO-18,  $\Phi 5.6\text{mm}$  (RoHS compliant)

### Applications

Industrial Applications

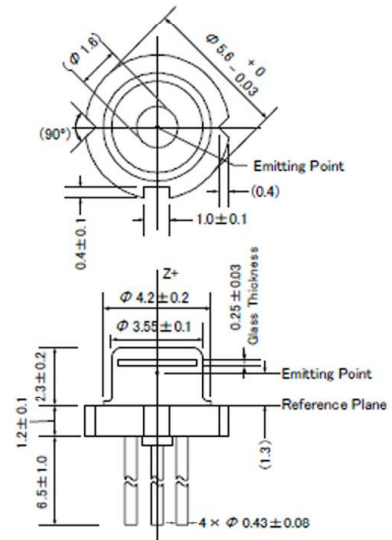
### Absolute Maximum Ratings

( $T_c=25^\circ\text{C}$ )

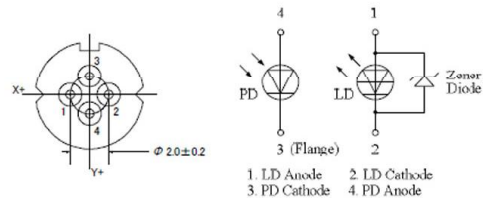
Parameter	Symbol	Rating	Unit
Optical Output	$P_o$	<b>80</b>	mW
Reverse Voltage	$V_r$	<b>5</b>	V
Operating Temperature	$T_{op}$	0~+60	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40~+85	$^\circ\text{C}$

\* Case Temperature

### Package



### Pin Connection



### Electrical and Optical Characteristics

( $T_c=25^\circ\text{C}$ )

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	$I_{th}$	-	-	<b>30</b>	<b>50</b>	mA	
Operating Current	$I_{op}$	$P_o=60\text{W}$	-	<b>100</b>	<b>130</b>	mA	
Operating Voltage	$V_{op}$	-	-	<b>5.6</b>	<b>6.2</b>	Volt	
Slope Efficiency	$\eta$	$P_o=60\text{W}$	<b>0.6</b>	<b>0.9</b>	-	mW/mA	
LD Reverse Voltage		-	-	-	-	V	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	$P_o=60\text{W}$	<b>7</b>	<b>10</b>	<b>13</b>	deg.
	Perpendicular	$\theta_{\perp}$	$P_o=60\text{W}$	<b>20</b>	<b>23.5</b>	<b>27</b>	deg.
Lasing Wavelength	$\lambda$		<b>483</b>	<b>488</b>	<b>493</b>	nm	
Spectral Width			-	-	-	nm	
Monitor Current	$I_m$		<b>0.2</b>	<b>1.0</b>	<b>1.8</b>	mA	

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

Note: The above specification is subject to change without notice

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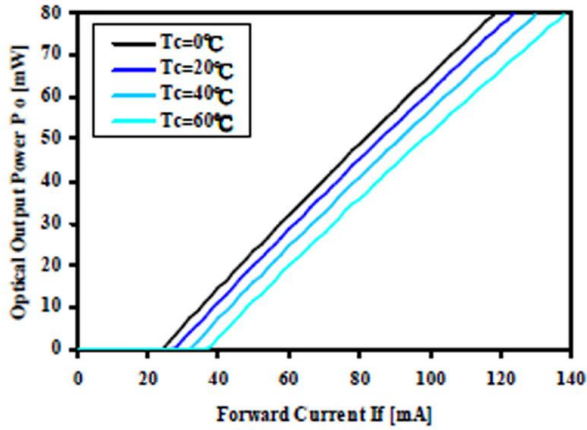
## SDL-488-60-501G



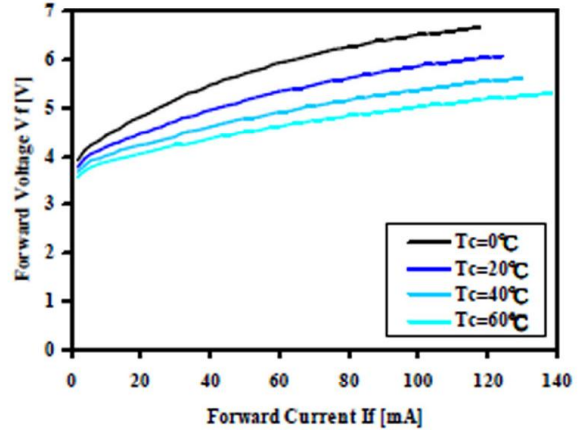
**SEMICOM**  
VISUAL

### Typical Characteristics

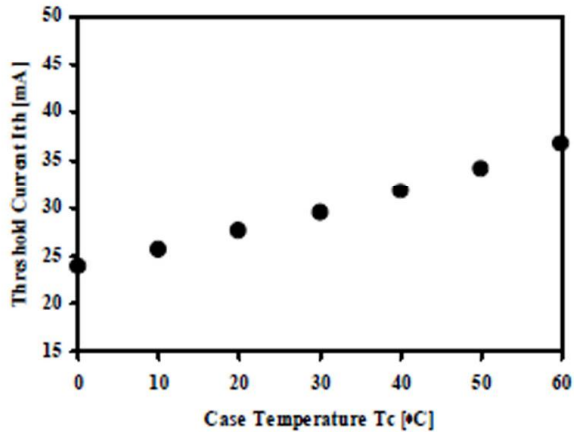
◆ Optical Output Power vs. Forward Current



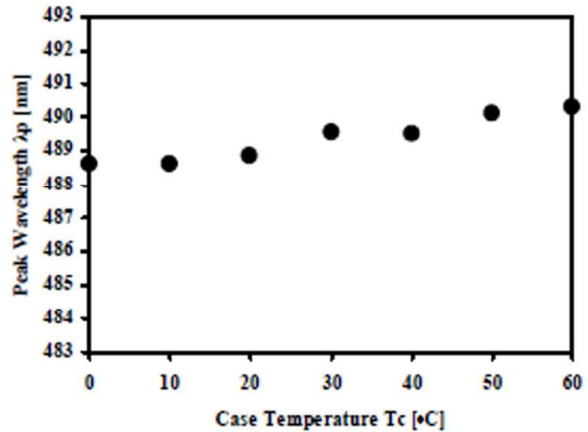
◆ Forward Voltage vs. Forward Current



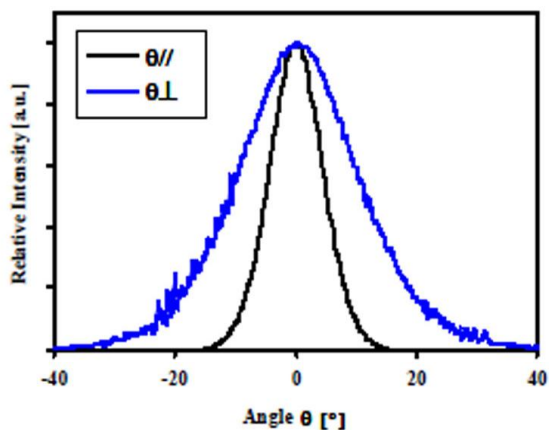
◆ Threshold Current vs. Case Temperature



◆ Peak Wavelength vs. Case Temperature



◆ Far Field Pattern



◆ Spectrum

