



## Laser Diode ZBD-LD-525-1000M-F111

ZBD-LD-525-1000M-F111 is a multimode laser diode with 1.0W CW output power at 525nm. Its beam pattern is linear with  $11^\circ \times 1^\circ$  ( $\theta_{//} \cdot \theta_{\perp}$ ). It is supplied in a 9mm floating mounted TO can with Zener Diode. The laser diode is suitable for opto-electronic applications.

### ■ Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Forward Current (Tc=25°C)	$I_f$	2.0	A
Reverse Current (Tc=25°C)	$I_r$ (LD)	85	mA
Storage Temperature	$T_{stg}$	-40~85	°C
Operating Case Temperature	$T_c$	0~65	°C

### ■ Initial Electrical/Optical Characteristics (Tc=25°C)

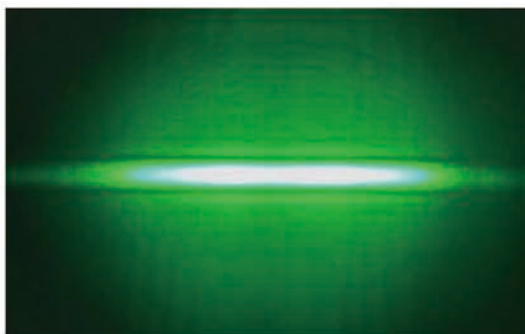
Parameter	Symbol	Condition	Min	Typ.	Max	Unit	
Optical Output Power	$P_o$	$I_f = 1.6A$	-	(1.0)	-	W	
Dominant Wavelength	$\lambda_d$	$I_f = 1.6A$	515	(525)	532	nm	
Threshold Current	$I_{th}$	CW	150	-	500	mA	
Slope Efficiency	$\eta$	CW	-	(0.7)	-	W/A	
Operating Voltage	$V_{op}$	$I_f = 1.6A$	4.0	-	6.0	V	
Beam Divergence*	Parallel	$\theta_{//}$	$I_f = 1.6A$	5	(11)	25	°
	Perpendicular	$\theta_{\perp}$	$I_f = 1.6A$	0.8	(1)	1.2	°

( ) are reference figures.

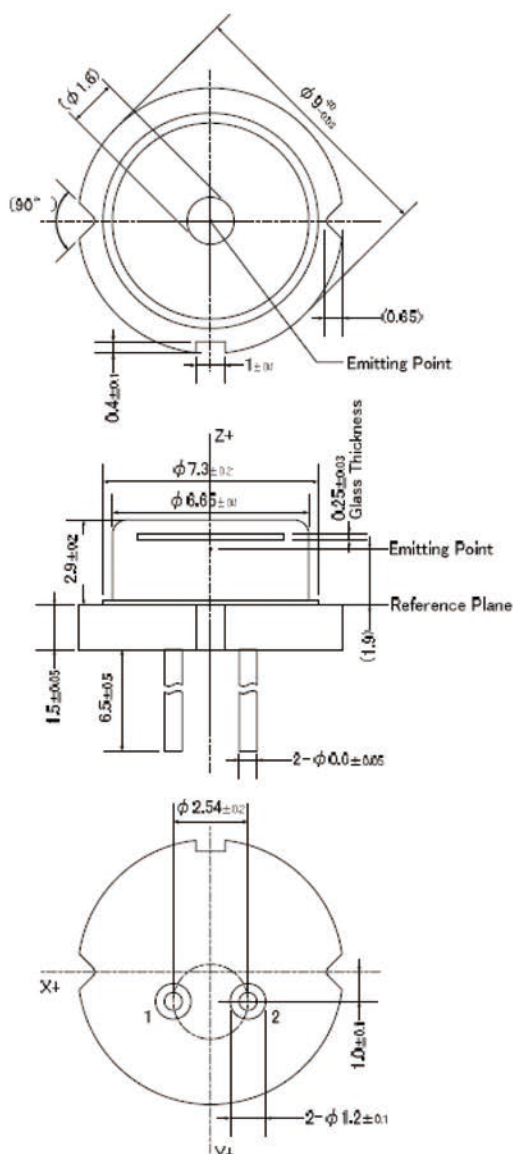
\* Full angle at  $1/e^2$  from peak intensity



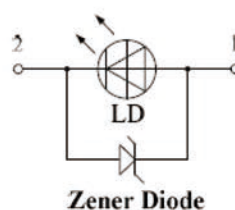
■ Beam Pattern



■ Outline Dimension



Connection



1. LD Anode  
2. LD Cathode

Figures in ( ) are reference purpose only.

Parts	Materials
Stem	Cu + Fe + Ni plating + Au plating
Lead	Ni-Fe-Co alloys + Ni plating + Au plating
Cap	Ni-Fe alloys + Ni plating
Glass	Borosilicate glass
Chip	Gallium nitride
Sub mount	Silicon carbide
Zener Diode	Silicon