



## Laser Diode ZBD-LD-525-2100M-FX-M02

ZBD-LD-525-2100M-FX-M02 is a multimode laser diode with 2.1 W 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

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current( $T_c=25^\circ\text{C}$ )	$I_f$	2.6	A
Revers Current( $T_c=25^\circ\text{C}$ )	$I_r(\text{LD})$	85	mA
Storage Temperature	$T_{\text{stg}}$	-40~85	$^\circ\text{C}$
Operating Case Temperature	$T_c$	0~55	$^\circ\text{C}$

### ■ Initial Electrical/Optical Characteristics ( $T_c=25^\circ\text{C}$ )

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	
Optical Output Power	$P_o$	$I_f = 2.4\text{A}$	1.7	(2.1)	2.4	W	
Dominant Wavelength	$\lambda_d$	$I_f = 2.4\text{A}$	519	(525)	531	nm	
Threshold Current	$I_{\text{th}}$	CW	170	-	450	mA	
Operating Voltage	$V_{\text{op}}$	$I_f = 2.4\text{A}$	3.7	-	5.4	V	
Slope Efficiency	$\eta$	CW	-	(2.6)	-	W/A	
Beam Divergence*	Parallel	$\theta_{//}$	$I_f = 2.4\text{A}$	5	(11)	25	$^\circ$
	Perpendicular	$\theta_{\perp}$	$I_f = 2.4\text{A}$	0.8	(1)	1.2	$^\circ$

( )are reference figures.

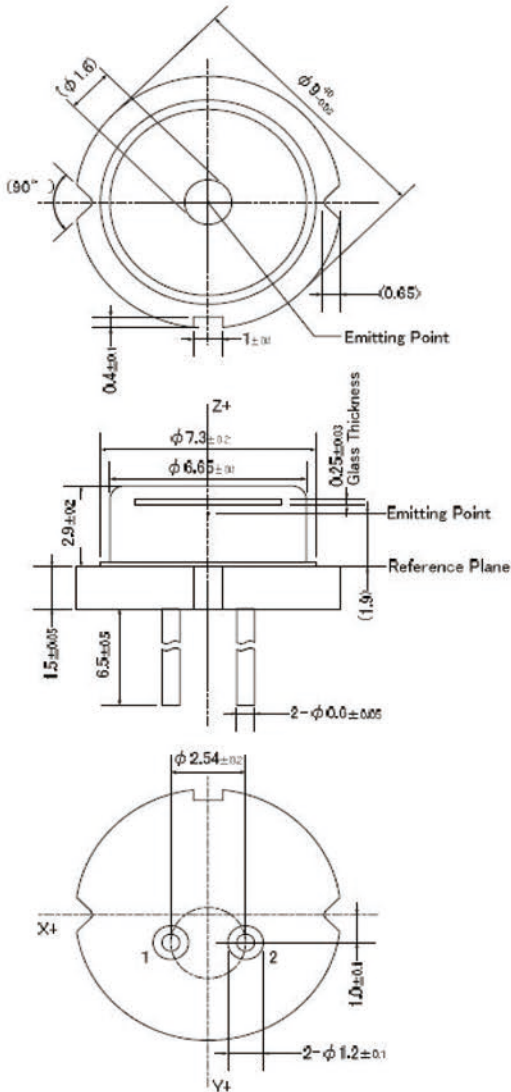
\*Full angle at  $1/e^2$  from peak intensity



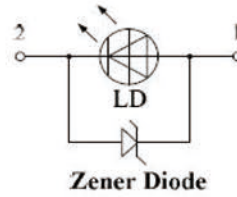
■ Beam Pattern



■ Outline Dimension (Unit: mm)



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