



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

ZBD-LD-525-2100M-M02 is a multimode laser diode with 2.1 W CW output power at 445nm. It is supplied in a 9mm floating mounted TO can with Zener Diode. The laser diode is suitable for the use in various 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_{stg}	-40~85	$^\circ\text{C}$
Operating Case Temperature	T_c	0~55	$^\circ\text{C}$

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

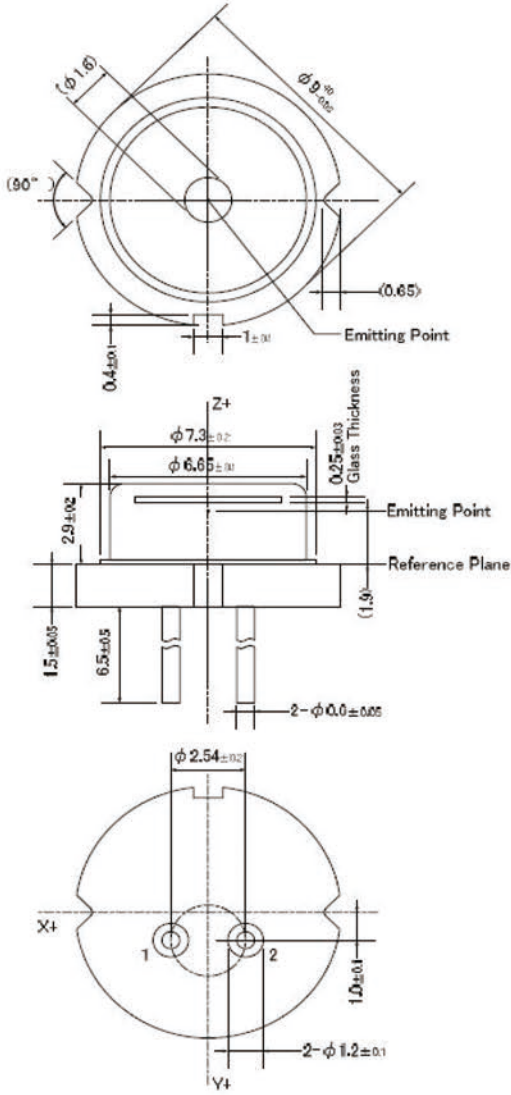
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	
Optical Output Power	P_o	$I_f = 2.4\text{A}$	1.7	(2.1)	2.4	W	
Dominant Wavelength	λ_d	$I_f = 2.4\text{A}$	519	(525)	531	nm	
Threshold Current	I_{th}	CW	170	-	450	mA	
Operating Voltage	V_{op}	$I_f = 2.4\text{A}$	3.7	-	5.4	V	
Slope Efficiency	η	CW	-	(2.6)	-	W/A	
Beam Divergence*	Parallel	$\Theta_{//}$	$I_f = 2.4\text{A}$	5	(11)	25	$^\circ$
	Perpendicular	θ_{\perp}	$I_f = 2.4\text{A}$	30	(42)	50	$^\circ$

()are reference figures.

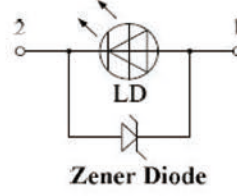
*Full angle at $1/e^2$ from peak intensity



■ 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