



## Laser Diode ZBD-LD-470-5200M-FS

ZBD-LD-470-5200M-FS is a multimode laser diode with 5.2 W CW output power at 470 nm. Its beam pattern is square with  $14^\circ \times 14^\circ$  ( $\theta_{//} \cdot \theta_{\perp}$ ). It is housed in a 9 mm float-mounted TO canister. The laser diode is suitable for optoelectronic applications.

### ■ Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current( $T_c=25^\circ\text{C}$ )	$I_f$	3.5	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	$T_c$	0~75	$^\circ\text{C}$

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

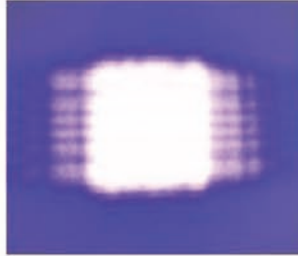
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	
Optical Output Power	$P_o$	$I_f = 3.0\text{A}$	4.6	(5.2)	-	W	
Dominant Wavelength	$\lambda_d$	$I_f = 3.0\text{A}$	463	(470)	477	nm	
Threshold Current	$I_{\text{th}}$	CW	250	-	570	mA	
Operating Voltage	$V_{\text{op}}$	$I_f = 3.0\text{A}$	3.5	-	5	V	
Beam Divergence*	Parallel	$\theta_{//}$	$I_f = 3.0\text{A}$	5	(14)	25	$^\circ$
	Perpendicular	$\theta_{\perp}$	$I_f = 3.0\text{A}$	5	(14)	25	$^\circ$

( )are reference figures.

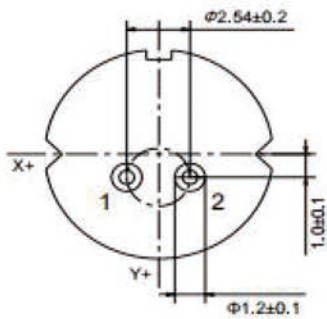
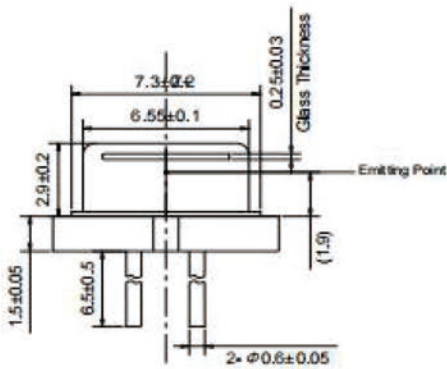
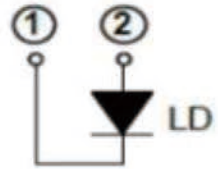
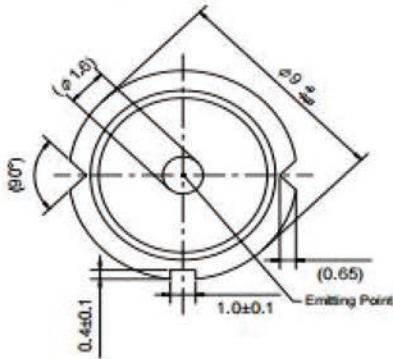
\*Full angle at  $1/e^2$  from peak intensity



■ Beam Pattern



■ Outline Dimension (Unit: mm)



Unit: mm