

670mW 500mW Laser Diode / Tentative

Description

The SLD1332V is a high power visible laser diode.

This laser diode has high brightness 500mW which can be achieved by QW structure.

Features

- High output power
Recommended optical power output: Pop=500mW
- QW structure
- 9mm Can-type Package

Application

- Measurement

Structure

- AlGaInP quantum well structure laser diode

Absolute Maximum Ratings(Tc=25)

•Optical power output	Pomax	0.55	W
•Reverse voltage	VR LD	2	V
	PD	15	V
•Operating temperature(Tc)	Topr	-10 to +30	
•Storage temperature	Tstg	-40 to +85	

Operating Lifetime

- MTTF 10,000H(effective value) at Po=0.5W,Tc=25

Warranty

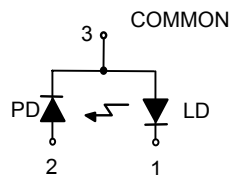
This warranty period shall be 90 days after receipt of the product or 1,000 hours operation time whichever is shorter.

Sony Quality Assurance Department shall analyze any product that fails during said warranty period, and if the product shall be replaced free of charge.

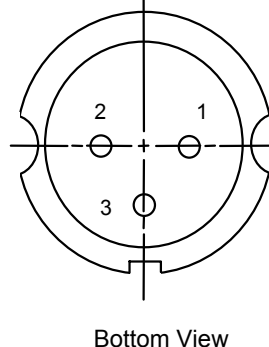
Laser diodes naturally have differing lifetimes which follow a Weibull distribution.

Special warranties are also available.

Connection Diagram



Pin configuration



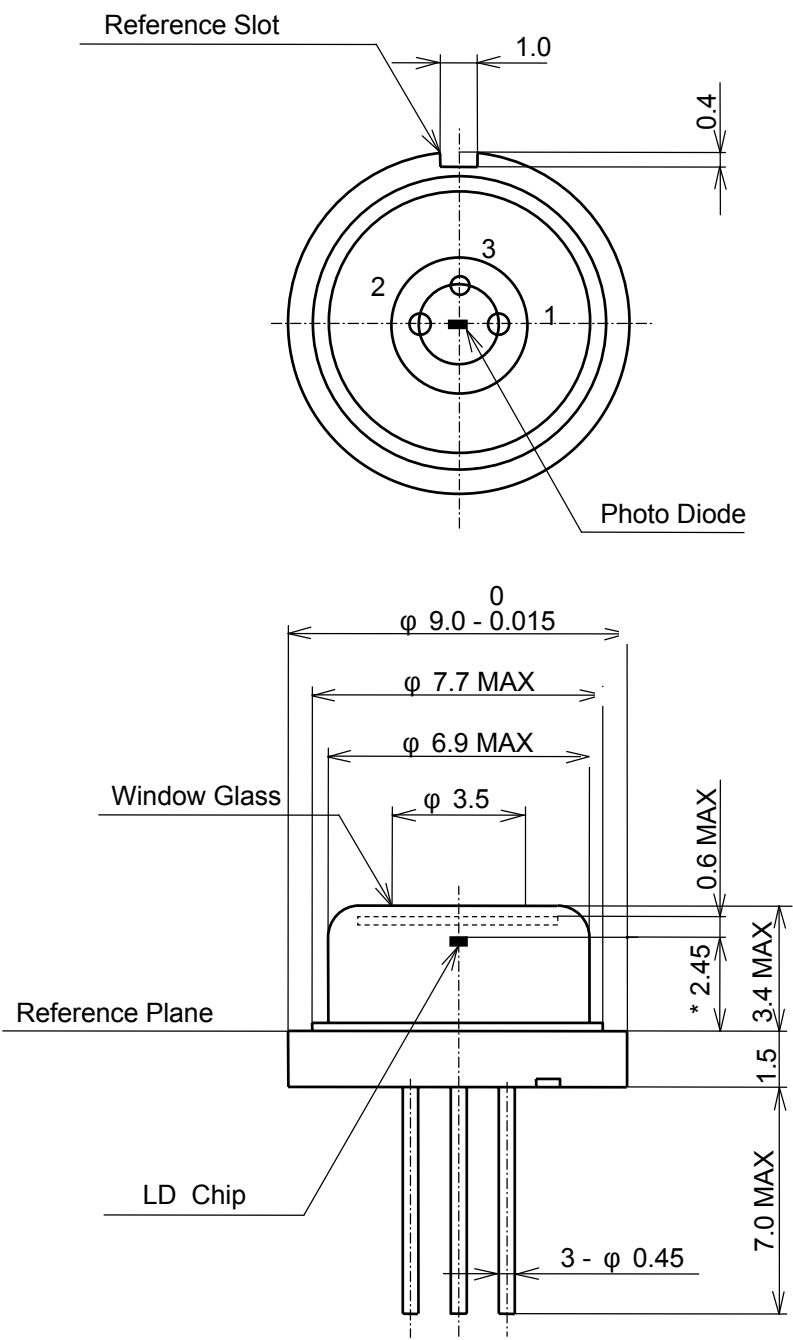
1. LD Cathode
2. PD Anode
3. COMMON

Electrical and Optical Characteristics

(Tc:case temperature, Tc=25)

Item		Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold current		I _{th}		-	0.4	0.7	A
Operating current		I _{op}	P _o = 0.5W	-	0.8	1.2	A
Operating voltage		V _{op}	P _o = 0.5W	-	2.4	3.2	V
Wavelength		λ _p	P _o = 0.5W	660	670	680	nm
Radiation angle	Perpendicular	θ	P _o = 0.5W	15	23	30	degree
	Parallel	θ //		4	8	15	degree
Positional accuracy	Position	ΔX, ΔY		-	-	±50	μ m
	Angle	Δ φ	P _o = 0.5W	-	-	±3	degree
		Δ φ //		-	-	±3	degree
Differential efficiency		η _D	P _o = 0.5W	-	1.0	-	W / A
Monitor current		I _{mon}	P _o = 0.5W	-	0.7	-	mA

M-248 (LO-11)



* Optical
Distance = 2.55 ± 0.05

SONY CODE	M-248
EIAJ CODE	_____
JEDEC CODE	_____

PCD $\phi 2.54$	
PACKAGE WEIGHT	1.2g