# SLD3134VL

## ■Features

Optical Output Power: 20mW

Can Type: \$\phi 5.6 mm with Photo Diode

Peak Wavelength: 405nm

■ Absolute Maximum Ratings

377	-	 -	20	-
	C=	 •	_	

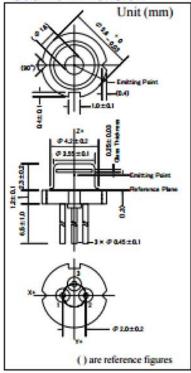
Item	Symbol	Absolute Maximum Ratings	Unit mW	
Optical Output Power	Po	20		
LD Reverse Voltage	Vr (LD)	2	V	
PD Reverse Voltage	Vr (PD)	4.8	V	
Storage Temperature	Tstg	-40 ~ 85	°C	
Operating Case Temperature	Te	-10 ~ 80	°C	

# Initial Electrical/Optical Characteristics

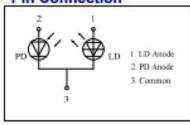
	-	-	0	è	
<b>6</b>	9	٦	m	ı	

Item		Condition	Symbol	Min	Typ.	Max	Unit
Optical Output Power		CW	Po	-	20		mW
Peak Wavelength*		Po=5mW	λр	400	405	410	nm
Threshold Current		CW	Ith		15	32	mA
Operating Current		Po=20mW	Iop		15	32	mA
Slope Efficiency		CW	η	0.9	1,2	1.8	W/A
Operating Voltage		Po=20mW	Vop		4.8	5.2	V
FWHM Beam Divergence*		Po=5mW	θ//	7	9	12	deg.
			θТ	15	19	23	deg.
Emission	Amala	Dames W	Δθ//	-2.0	-	2.0	deg.
Point Accuracy	Angle Po=5mW	Δθ⊥	-2.5		2.5	deg.	
Monitor Current		Po=20mW	Im	0.2	0.6	1.0	mA

# **Outline Dimension**



# **Pin Connection**



Measuring specifications

#### ■Cautions

#### (1) Safety of Laser light

- Laser beam are extremely dangerous to human eyes. Never look at laser beam directly and/or through optical lens. When handling the LDs, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.
- sony LDs are classified in Class 3B of IEC60825-1 and 21 CFR Part 1040.10 Safety Standards. It is absolutely necessary to take overall safety measures against User's modules, equipment and systems into which sony LDs are incorporated and/or integrated.



### (2) Operating method

- The LD shall change its forward voltage requirement and optical output power according to temperature change. Also, the LD will require more operation current to maintain same output power as it degrades. In order to maintain output power, use of APC (Automatic Power Control) is recommended, which use monitor feedback to adjust the operation current.
- Confirm that electrical spike current generated by switching on and off does not exceed the maximum operating current level specified herein above as absolute max rating. Also, employ appropriate countermeasures to reduce chattering and/or overshooting in the Circuit.

#### (3) Static Electricity

 Static electricity or electrical surges will reduce and degrade the reliability of the LDs. It is recommended to use a wrist strap or anti-electrostatic glove when handling the Product.

## (4) Absolute Maximum Rating

Active layer of LDs shall have high current density and generate high electric field during its operation. In order to
prevent excessive damage, the LD must be operated strictly below Absolute Max Rating.