

LASER DIODE

SONY

SLD3134VF-31

Features

- Wavelength : 405nm(Typ.)
- Output power : 20mW
- Threshold current : $I_{th}=26\text{mA}$ (Typ.)
- Package : $\phi 5.6\text{mm}$ with PD

Applications

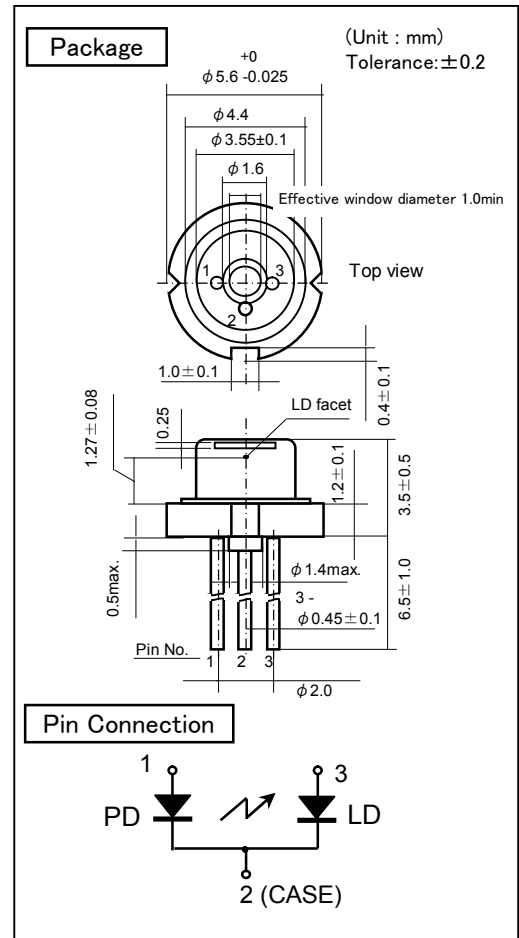
- Laser module
- Industrial Use

Absolute Maximum Ratings

($T_c=25^\circ\text{C}$)

Parameter	Symbol	Ratings	Unit
Light Output	$P_o(\text{CW})$	35	mW
Reverse Voltage (LD)	VR	2	V
Operating Temperature ¹⁾	T_{opr}	0 to +75	$^\circ\text{C}$
Storage Temperature ¹⁾	T_{stg}	-40 to +85	$^\circ\text{C}$

1) Case temperature.



Electrical and Optical Characteristics ^{2) 3) 4) 5)}

($T_c=25^\circ\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I_{th}	CW	-	20	30	mA	
Operating Current	I_{op}	$P_o=20\text{mW}$	-	35	45	mA	
Operating Voltage	V_{op}	$P_o=20\text{mW}$	-	4.8	5.6	V	
Lasing Wavelength	L_p	$P_o=20\text{mW}$	400	405	410	nm	
Beam ⁶⁾ Divergence	Perpendicular	Q_v	$P_o=20\text{mW}$	16	19	23	$^\circ$
	Parallel	Q_h	$P_o=20\text{mW}$	6	8.5	12	$^\circ$
Off Axis Angle	Perpendicular	dQ_v	$P_o=20\text{mW}$	-3	-	3	$^\circ$
	Parallel	dQ_h	$P_o=20\text{mW}$	-3	-	3	$^\circ$
Differential Efficiency	SE	$P_o=20\text{mW}$	0.7	1.1	-	mW/mA	
Monitoring Output Current	I_m	$P_o=20\text{mW}$	0.1	0.2	0.5	mA	

2) Initial Values. 3) All the above values are evaluated with Tottori sanyo's measuring apparatus.

4) It makes a typical value a Reference Value. 5) Measurement condition : CW. 6) Full angle at half maximum.

Note : The above product specification are subject to change without notice