

BLUE - VIOLET LASER DIODE

DL-5146-101S

SANYO

Ver.3 April. 2009

Features

- Wavelength : 405nm(Typ.)
- Output power : 40mW
- Threshold current : I_{th}=35mA(Typ.)
- Package : ϕ 5.6mm with PD

Applications

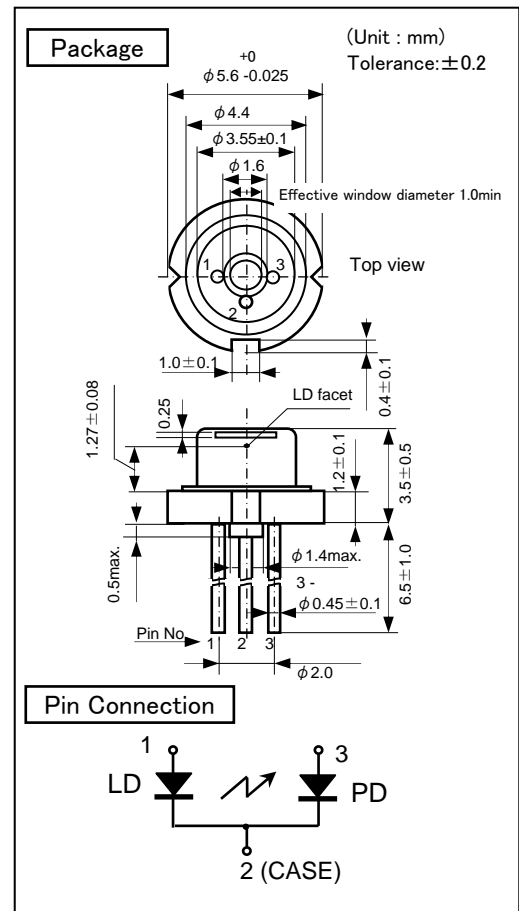
- Laser module
- Industrial Use

Absolute Maximum Ratings

(T_c=25°C)

Parameter	Symbol	Ratings	Unit
Light Output	P _o (CW)	45	mW
Reverse Voltage (LD)	VR	2	V
Operating Temperature ¹⁾	T _{opr}	0 to +75	°C
Storage Temperature ¹⁾	T _{stg}	-40 to +85	°C

1) Case temperature.



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

(T_c=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I _{th}	CW	-	35	55	mA	
Operating Current	I _{op}	P _o =40mW	-	70	100	mA	
Operating Voltage	V _{op}	P _o =40mW	-	5.2	5.7	V	
Lasing Wavelength	L _p	P _o =40mW	395	405	415	nm	
Beam ⁶⁾ Divergence	Perpendicular	Q _v	P _o =40mW	16	19	23	°
	Parallel	Q _h	P _o =40mW	6	8	12	°
Off Axis Angle	Perpendicular	dQ _v	P _o =40mW	-3	-	3	°
	Parallel	dQ _h	P _o =40mW	-3	-	3	°
Differential Efficiency	SE	P _o =40mW	0.8	1.2	-	mW/mA	
Monitoring Output Current	I _m	P _o =40mW	0.1	0.3	1.0	mA	

2) Initial Values. 3) All the above values are evaluated with 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.

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