

BLUE-VIOLET LASER DIODE

DL-4146-301S

Tentative

SANYO

Ver.3 Oct. 2007

Features

- Short wavelength : 405 nm (Typ.)
- Low threshold current : $I_{th} = 26 \text{ mA}$ (Typ.)
- Package : $\phi 5.6 \text{ mm}$

Applications

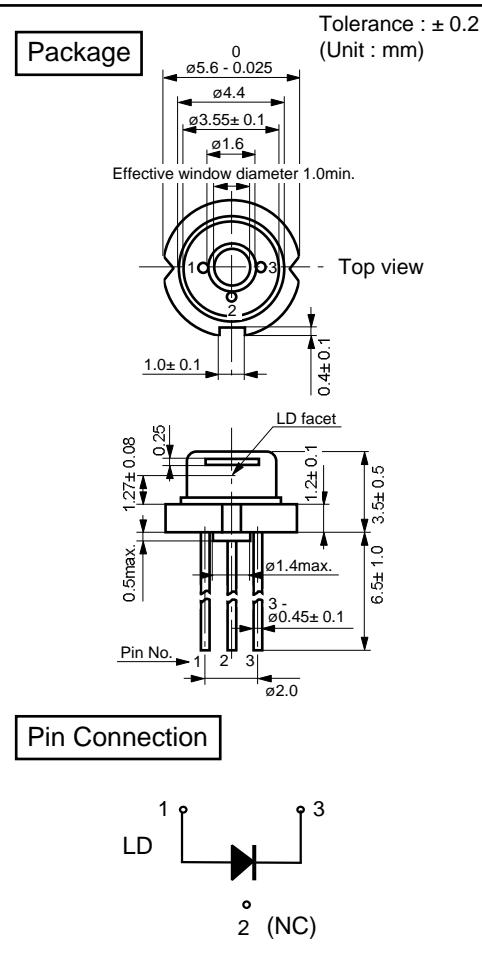
Industrial Use

Absolute Maximum Ratings

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

Parameter	Symbol	Ratings	Unit
Light Output	CW	P_o (CW)	20
Reverse Voltage	Laser	V_R	2
Operating Temperature	¹⁾ Topr	0 to +75	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +85	$^\circ\text{C}$

1) Case temperature.



Electrical and Optical Characteristics

2) 3) 4) 6)

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	CW	-	26	50	mA
Operating Current	I_{op}	$P_o=10\text{mW}$	-	34	60	mA
Operating Voltage	V_{op}	$P_o=10\text{mW}$	-	4.8	5.6	V
Lasing Wavelength	λ_p	$P_o=10\text{mW}$	395	405	415	nm
Beam Divergence ⁵⁾	Perpendicular	$P_o=10\text{mW}$	16	19	23	$^\circ$
	Parallel	$P_o=10\text{mW}$	6	8.5	12	$^\circ$
Off Axis Angle	Perpendicular	$P_o=10\text{mW}$	-2	-	2	$^\circ$
	Parallel	$P_o=10\text{mW}$	-2	-	2	$^\circ$
Differential Efficiency	SE	$P_o=10\text{mW}$	0.8	1.3	-	mW/mA

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

4) Reference values 5) Full angle at half maximum 6) Measurement condition : CW

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

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