

BLUE-VIOLET LASER DIODE

DL-LS5024

Tentative



Ver.1 Dec. 2006

Features

- Short wavelength : 405 nm (Typ.)
- Low threshold current : I_{th} = 28 mA (Typ.)
- Package : $\phi 5.6$ mm

Applications

Industrial Use

Standard usage condition

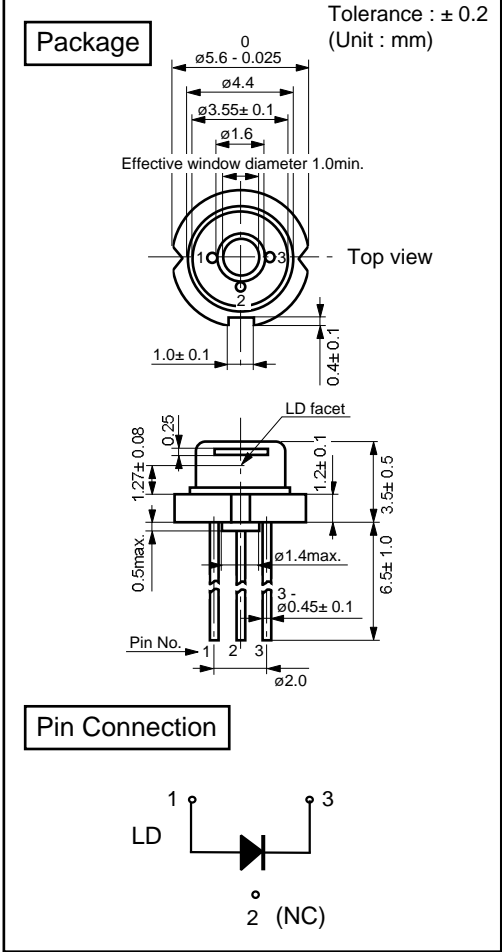
- Light Output: ≤ 10 mW CW

Absolute Maximum Ratings

(T_c=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	P _o (CW)	20	mW
Reverse Voltage	Laser	V _R	2	V
Operating Temperature ¹⁾		T _{opr}	0 to +60	°C
Storage Temperature		T _{stg}	-40 to +85	°C

1) Case temperature.



Electrical and Optical Characteristics ^{2) 3) 4) 6)}

(T_c=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	28	50	mA
Operating Current		I _{op}	P _o =10mW	-	37	60	mA
Threshold Voltage		V _{th}	CW	-	4.5	5.0	V
Operating Voltage		V _{op}	P _o =10mW	-	4.6	5.5	V
Lasing Wavelength		L _p	P _o =10mW	395	405	415	nm
Beam ³⁾ Divergence	Perpendicular	Q _v	P _o =10mW	15	18	23	°
	Parallel	Q _h	P _o =10mW	6	8	12	°
Off Axis Angle	Perpendicular	dQ _v	P _o =10mW	-3	-	3	°
	Parallel	dQ _h	P _o =10mW	-2	-	2	°
Differential Efficiency		SE	P _o =10mW	0.8	1.2	-	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.