

BLUE-VIOLET LASER DIODE

DL-LS5010

Tentative

SANYO

Ver.2 July. 2003

Features

- Short wavelength : 405 nm (Typ.)
- Light Output: 50mW CW at 100mW (pulse)
- Low threshold current : $I_{th} = 50$ mA (Typ.)
- Small package : $\phi 5.6$ mm

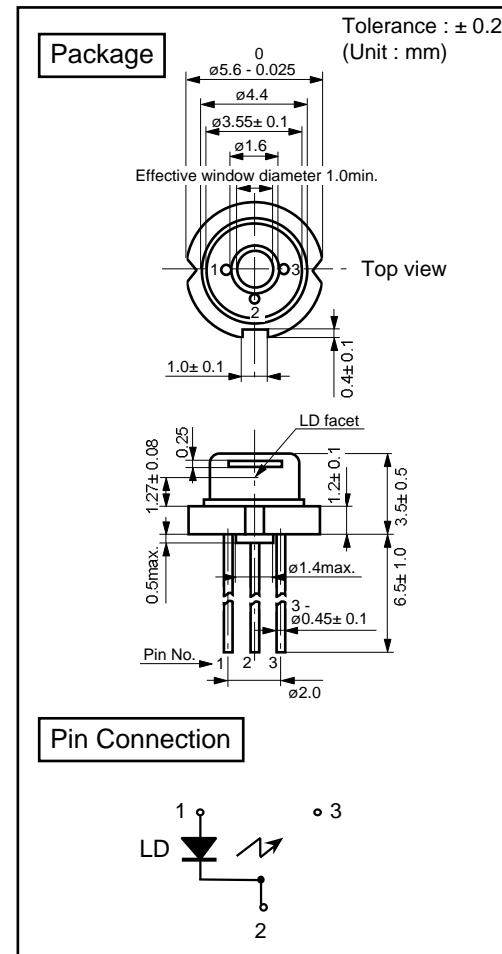
Applications

Next generation DVD
Laser module

Absolute Maximum Ratings

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

Parameter	Symbol	Ratings	Unit
Light Output	CW	P_o (CW)	50
	Pulse	P_o (pulse)	100
Reverse Voltage	Laser	V_R	V
Operating Temperature	T_{opr}	-10 to +60	°C
Storage Temperature	T_{stg}	-40 to +85	°C



Electrical and Optical Characteristics

1) 2)

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	CW	-	50	-	mA
Operating Current	I_{op}	$P_o=50\text{mW}$	-	100	-	mA
Operating Voltage	V_{op}	$P_o=50\text{mW}$	-	5.9	-	V
Lasing Wavelength	λ_p	$P_o=50\text{mW}$	-	405	-	nm
Beam Divergence ³⁾	Perpendicular	$P_o=50\text{mW}$	-	22	-	°
	Parallel	$P_o=50\text{mW}$	-	8	-	°
Off Axis Angle	Perpendicular	dQ_v	-	-	± 3	°
	Parallel	dQ_h	-	-	± 2	°
Differential Efficiency	dP_o/dI_{op}	-	-	1	-	mW/mA
Astigmatism	A_s	$P_o=50\text{mW}$	-	3	-	μm

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

3) Full angle at half maximum

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